Cornell University

Ithaca, New York

COLLEGE OF ARCHITECTURE

LIBRARY

Gift of C. A. Martin.

Cornell University Library
NA 737.C31W92
The Work of Messers. Carrere & Hastings
3 1924 015 330 149

DATE DUE

Interlibrary Loan

GAYLORD

PRINTED IN U.S.A.

THE WORK

OF

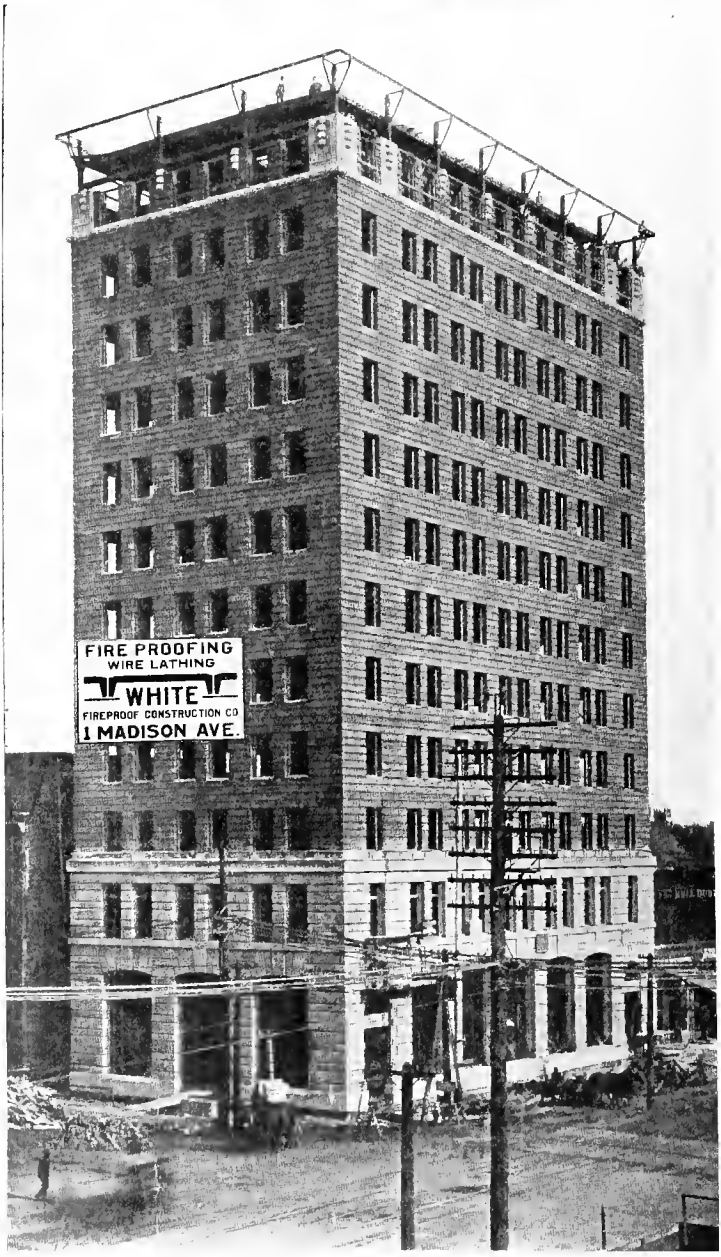
MESSRS. CARRÈRE & HASTINGS

THE ARCHITECTURAL RECORD

JANUARY

Published By The
Architectural Record Co.
NEW YORK

The Sign of Good Fireproofing



SEND for skeleton specifications of the system with tension members of *correct* section and placement in the arch.

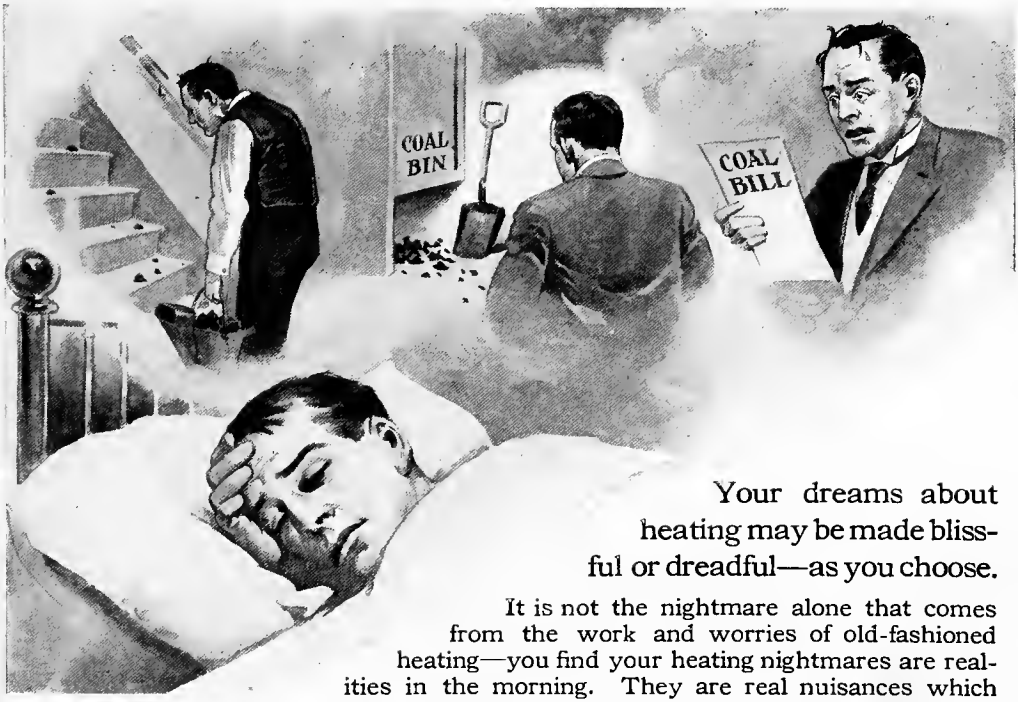
New York *and* Montreal

PIONEER OFFICE BUILDING, COLUMBIA, S. C.

Tidewater Building Co.
Builders

Brite & Bacon
Architects

Stop heating nightmares



Your dreams about heating may be made blissful or dreadful—as you choose.

It is not the nightmare alone that comes from the work and worries of old-fashioned heating—you find your heating nightmares are realities in the morning. They are real nuisances which spoil your peace of mind by day and wreck your sleep by night. But there's a remedy.

AMERICAN RADIATORS & IDEAL BOILERS

afford the only means of heating which bring repose and health. These outfits for Hot-Water and Low-Pressure Steam heating produce nothing but cleanly, soft, even temperature—*suited to a baby or an athlete.* They should be installed in every home. They save their cost by cutting down the coal bills. They do away with ash-dust, soot, and hard work. Their cleanliness saves much wear on household furnishings. They are so built in small sections that they can be easily put in any house—old or new—farm or city.

Any person, no matter how inexperienced, may easily operate an IDEAL Boiler. It requires less care than a parlor stove.

A No. 3-22 IDEAL Boiler and 600 ft. of 38-in. AMERICAN Radiators, costing the owner $255, were used to Hot-Water this heat cottage.

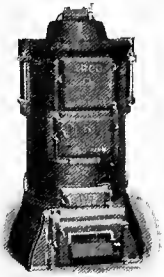
A No. 22 IDEAL Boiler and 240 ft. of 38-in. AMERICAN Radiators, costing the owner $115, were used to Hot-Water heat this cottage.

At these prices the goods can be bought of any reputable, competent fitter. This did not include cost of labor, pipe, valves, freight, etc., which installation is extra and varies according to climatic and other conditions.

Our book, "Best Ways to Run the Boiler," furnished with each shipment, tells just how to get the best results in mild, cold, or severe weather, and from any kind of fuel. It presents a few simple rules, readily understood, and if followed gives absolute control of the fire, and makes every ounce of fuel yield its *full* heat.

Our interest in the heating outfit does not cease with its sale, and should any feature in the care or operation of the Boiler not be understood, we most cordially invite correspondence.

Write us to-day for our new and valuable catalog—sent free.



Branches in all large cities

AMERICAN RADIATOR COMPANY

Write to Dept. 15
CHICAGO

DETAIL PHOTO OF LIBRARY MANTEL IN RESIDENCE OF MR. JOHN DUPEE, OCONOMOWOC, WIS.
C. A. Eschweiler, Architect, Milwaukee, Wis.

Directly opposite the mantel is the main entrance to the library, which on entering the room makes the mantel the central feature in a room which is 30 x 50 feet, and which is trimmed in Circassian Walnut of selected figure, finished in wax

SCHICK-JOHNSON COMPANY

1737 to 1745 North Paulina Street, Chicago, Ill.

Sales Office, 310-312 Railway Exchange Building

Forty-one of the buildings designed by Messrs. Carrere & Hastings, mentioned in this magazine, are fitted with Yale & Towne Hardware.

THE materials and workmanship in Yale & Towne Builders' Hardware are in each case of the highest possible character and of quality consistent with the work and its surroundings.

We have patterns for many pieces in each design in almost every school of ornament, sometimes several designs in the same school.

Special designs made from architects' sketches.

Hardware made from architects' own drawings with the utmost fidelity.

The Yale & Towne Mfg. Co.

EXHIBIT ROOMS
251 Fifth Avenue, New York

GENERAL OFFICES
9 Murray Street, New York

LOCAL OFFICES

CHICAGO BOSTON PHILADELPHIA SAN FRANCISCO

Architects Standard Bronze Company

Number One Madison Avenue (The Arcade), New York

Exclusive
Designers and Makers of
Lighting Fixtures

We manufacture lighting fixtures which cannot be duplicated in solid metal anywhere in the world. The very low cost of this magnificent product is the greatest incentive to its use.

No under cut too difficult to cast by our process

Our success is unparalleled in the Metalizing of Architectural Compo-Work, Mantels, Capitals, Consoles and Statuary

Period and Classic Drawings submitted for Electroliers, Portables, Standards and Candelabra
Bank Fixtures and Railings

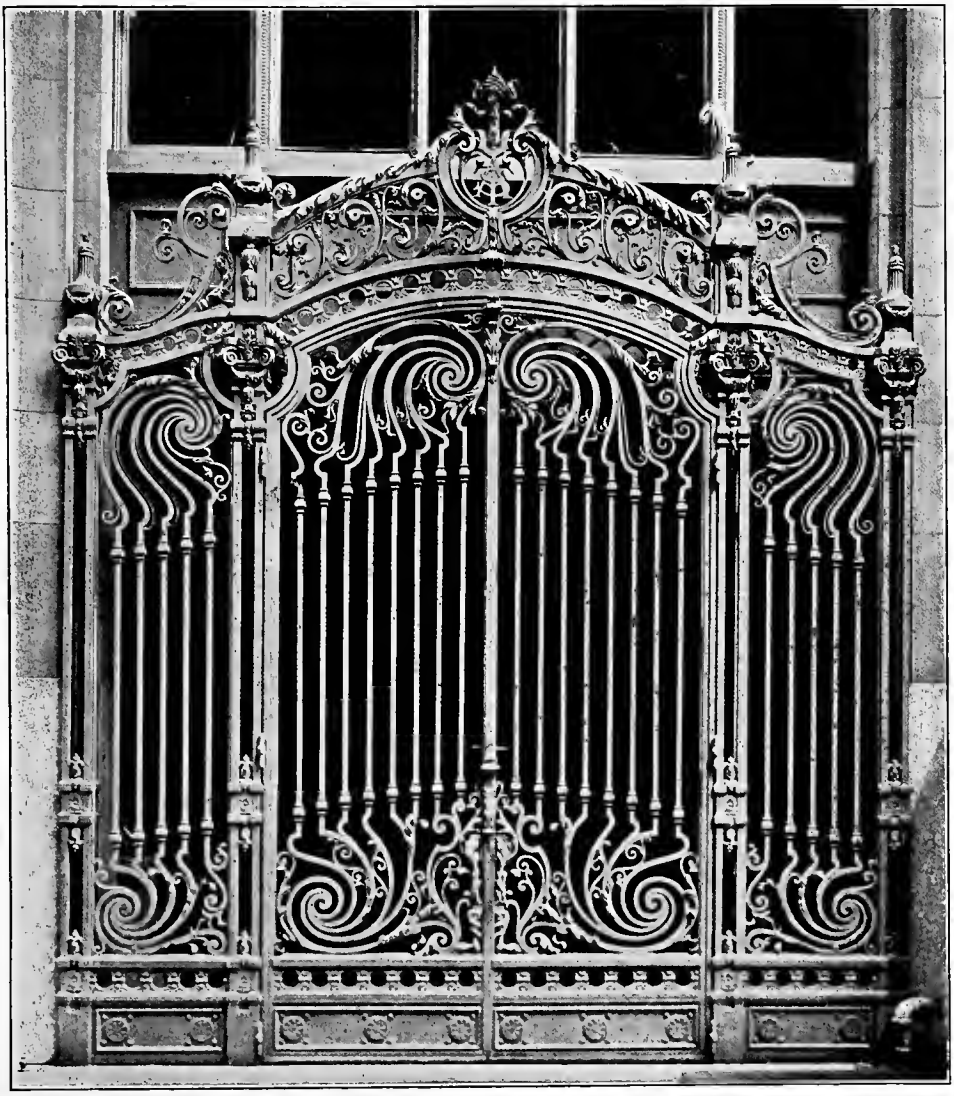
We metalize all kinds of non-conductive surfaces, and produce all colors and finishes on our metals.

Finer results than can be obtained in carved wood or solid metal, at great saving of cost.

Reference

Cafe de l'Opera electroliers, bronzes and polished brass figures were furnished by us
Other references by request

We Invite Correspondence



WROUGHT IRON ENTRANCE GATES. AMERICAN TRUST AND SAVINGS BANK, CHICAGO
JARVIS HUNT, ARCHITECT

THE WINSLOW BROS. COMPANY

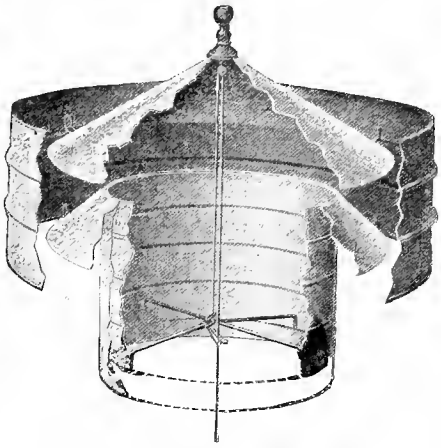
Ornamental Iron and Bronze

New York **Chicago** **San Francisco**

Agencies in all principal cities of United States

23—Count Them—23

This isn't slang, but an actual record of the number of orders for Burt Ventilators that the United States Government has placed with us. They have come back twenty-three times for Burt Ventilators, because the ones they got before were so perfectly satisfactory. That's a good record and shows that

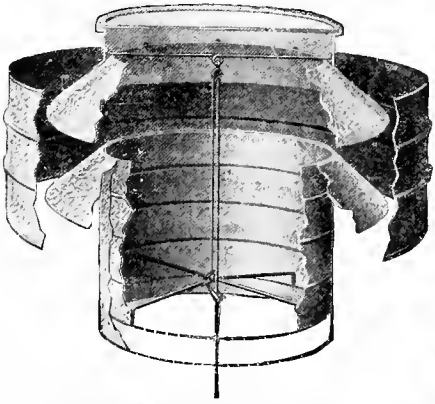


Metal Top Ventilator.
Notice Sliding Sleeve Damper. (Patented.)

Burt
Combination Skylight
Ventilators

are what we say they are, the best, the strongest, the most efficient ventilator on the market today. Burt Ventilators are made of the best material and workmanship obtainable, furnished with metal or glass tops, if desired, and provided with patented adjustable sliding sleeve dampers, storm and dustproof at all times, and never shut out the light with any adjustment of damper.

Write for new 96-page catalog showing fine illustrations of mills, factories, shops, foundries and residences where Burt Ventilators are in successful use.

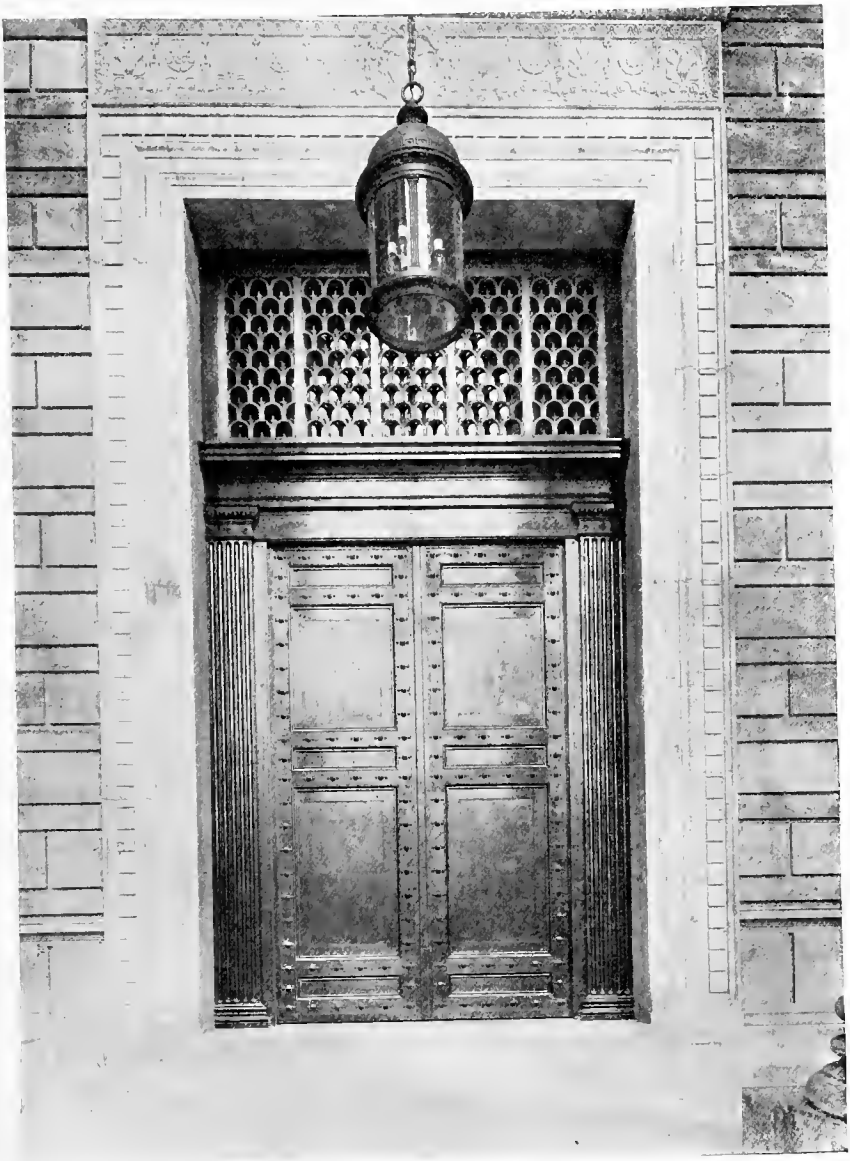


Notice Sliding Sleeve Damper (patented). Furnished with flat wired glass, up to and including the 72-inch size. Metal Tops furnished if desired.

The Burt Mfg. Co.

525 MAIN STREET
AKRON, OHIO

GEORGE W. REED & CO., Montreal,
Sole Manufacturers of "Burt" Ventilators for Canada.



CAST BRONZE DOORS, MAIN ENTRANCE OF CARNEGIE INSTITUTION
(ADMINISTRATION BUILDING)
S. E. Corner 16th and P Streets, Washington, D. C.

CARRERE AND HASTINGS, ARCHITECTS

Modeled, cast and erected by

Jno. Williams, Inc.

Ornamental Bronze and Iron Work

Office, Foundry and Shops
Borough of Manhattan, New York

BRONZE ENTRANCE DOORS, RESIDENCE OF MR. HENRY M. FLAGLER, PALM BEACH, FLORIDA
Carrere & Hastings, Architects

MADE BY

WM. H. JACKSON COMPANY

29 East 17th Street, New York City
163 Michigan Avenue, Chicago

ARTISANS IN ALL METALS

MAIN DRIVEWAY GATES AND LANTERNS, RESIDENCE OF MR. HENRY M. FLAGLER
PALM BEACH, FLORIDA

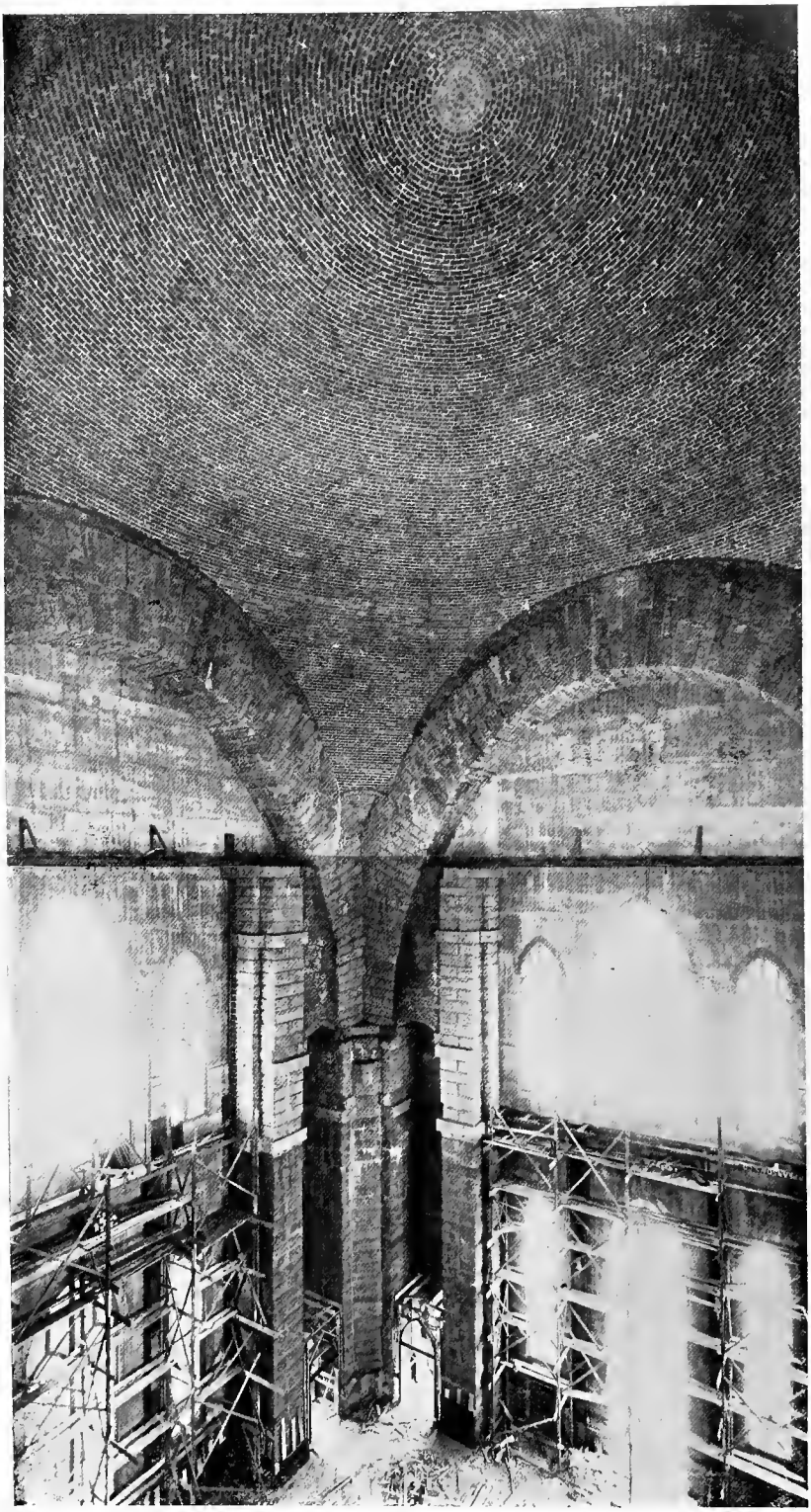
Carrere & Hastings, Architects

MADE BY

WM. H. JACKSON COMPANY

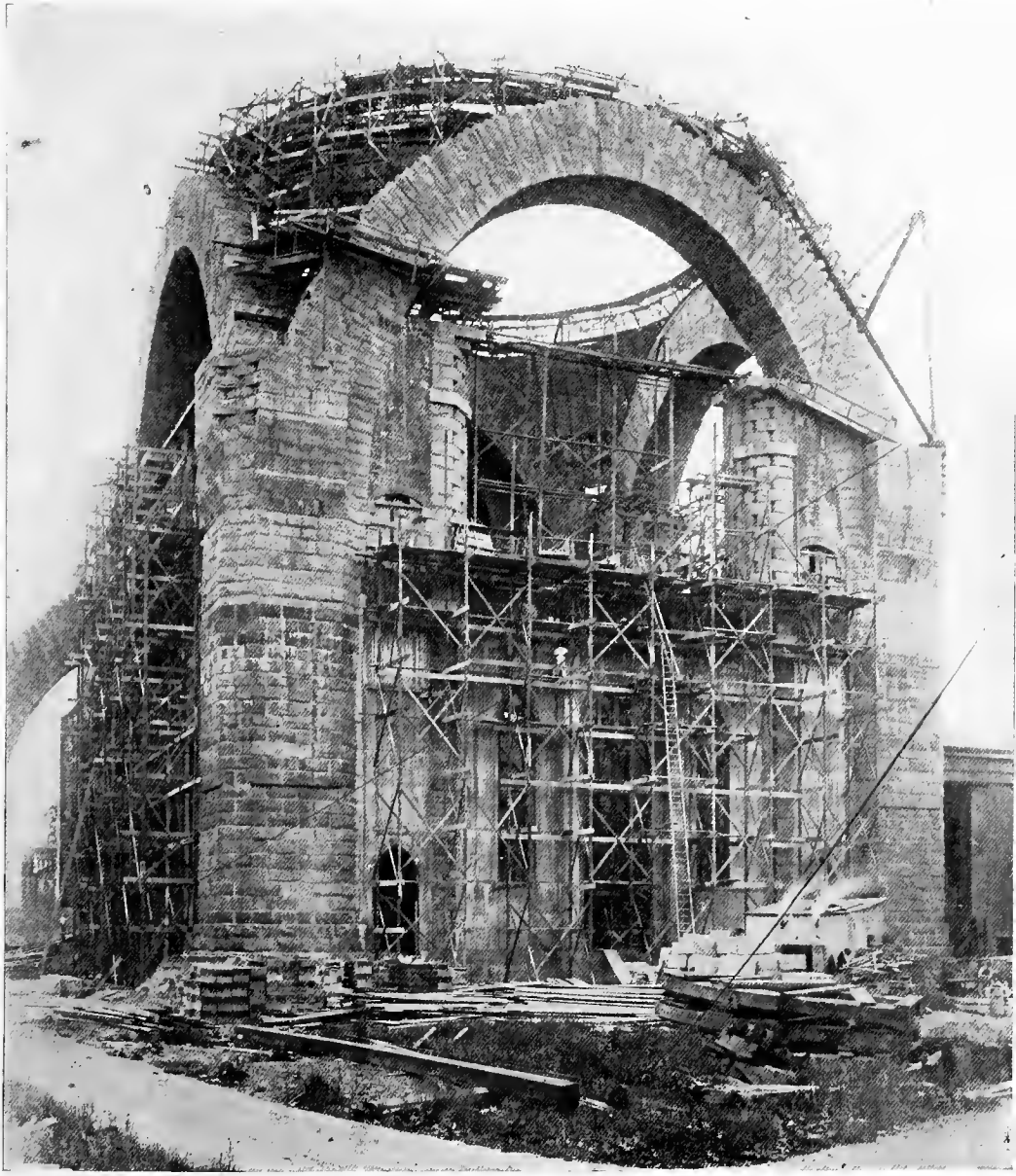
29 East 17th Street, New York City
163 Michigan Avenue, Chicago

ARTISANS IN ALL METALS



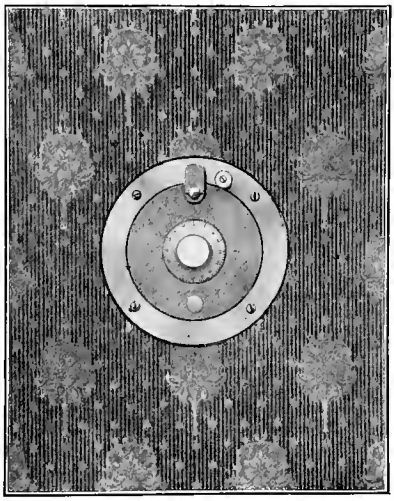
R. GUASTAVINO CO.

New York City **Boston, Mass.**



INTERIOR AND EXTERIOR VIEWS OF CROSSING DOME, CATHEDRAL OF ST. JOHN THE DIVINE
MESSRS. HEINS & LA FARGE, ARCHITECTS

This dome, 135 feet in diameter at its widest span, was erected without the use of interior scaffold or falsework, the construction being entirely self-supporting—a constructional feat never before accomplished in large masonry domes of this type.



WALL SAFES

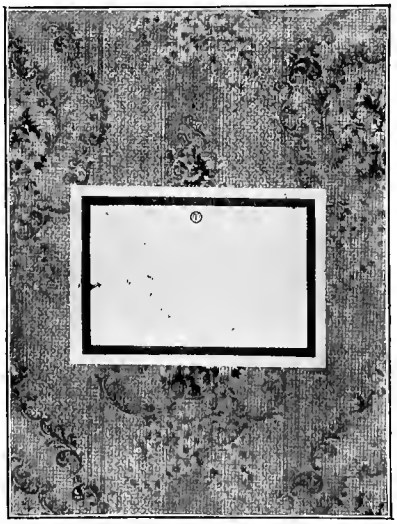
FOR CITY AND COUNTRY RESIDENCES AND APARTMENTS

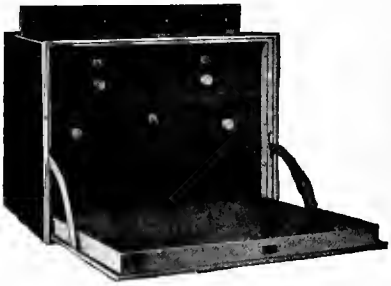
WITH OR WITHOUT BURGLAR ALARMS

PRODUCT OF THE

HERRING-HALL-MARVIN SAFE COMPANY

New York Boston Philadelphia Chicago St. Louis San Francisco
Hamilton, Ohio



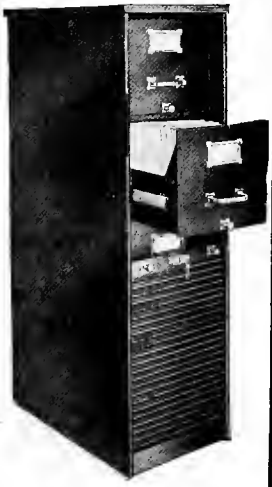


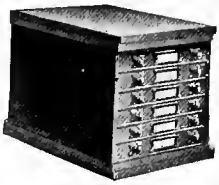
The Aristocracy of Metal Furniture and Filing Devices

STEEL ART

FIRE-PROOF FURNITURE AND CONSTRUCTION CO

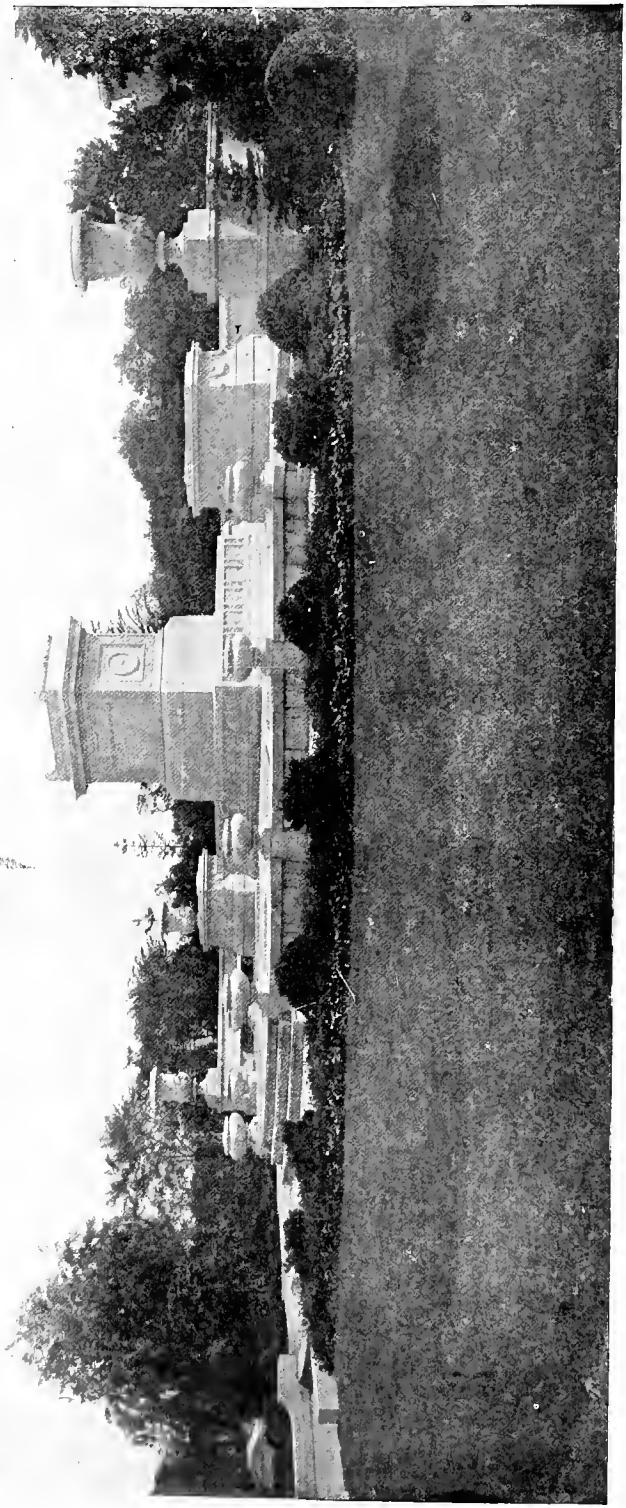
HAMILTON, OHIO, U. S. A.





HERRING-HALL-MARVIN SAFE CO., Selling Agents

New York Boston Philadelphia Chicago St. Louis San Francisco



Carrere & Hastings, Architects

BORDEN TOMB, WOODLAWN CEMETERY

Executed by Batterson & Eisele

BATTERSON & EISELE IMPORTERS AND WORKERS OF MARBLE, ONYX & GRANITE

OFFICE, TIMES BUILDING, NEW YORK

WORKS, EDGEWATER, N. J.

STROMBERG-CARLSON

INTERCOMMUNICATING TELEPHONES

AUTOMATIC KEY TYPE

The tangible evidence that "Stromberg-Carlson" equipments are preferred by discriminating architects and house owners are our many recent orders—each an unbiased tribute to recognized superiority in all things that make "Stromberg-Carlson" telephones the best choice.

Rochester Residence
E. E. Boynton,
Esq.

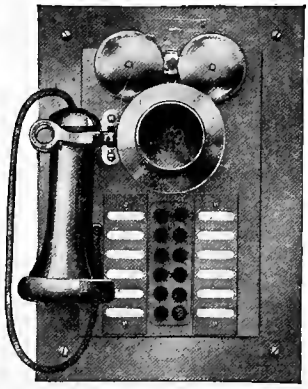
Frank L. Wright,
Architect,
Oak Park,
Ill.

Three
Flush Type
Wall Telephones

Non-Flush
Desk
and Wall Types

CODE No. 956

¶ This flush type wall instrument has a capacity of 12 stations, each push button selecting and ringing the other station desired. Equipped with standard talking circuit apparatus and furnished in any metal or wood imitation finish desired. Station designators removed without difficulty.



¶ No accessory apparatus is necessary with this telephone-compactness and accessibility are notable features. All the interior apparatus except No. 160 Key bank mounts on detachable swinging front. Removable metal junction box contains terminal strip for cables. The most dependable apparatus made.

Let us send Booklet No. 201, and tell you more.

There are over 1,300,000 "Stromberg-Carlson" *Independent* Telephones in use today.

Telephones for Any Kind of Service

STROMBERG-CARLSON TEL. MFG. CO.

ROCHESTER, NEW YORK, U.S.A.

CHICAGO, ILL. KANSAS CITY, MO.

Switchboards for Any Size System.

GOLDWIN SMITH HALL, CORNELL UNIVERSITY

CARRÈRE & HASTINGS, ARCHITECTS

ERECTED BY

John V. Schaefer, Jr., & Co.

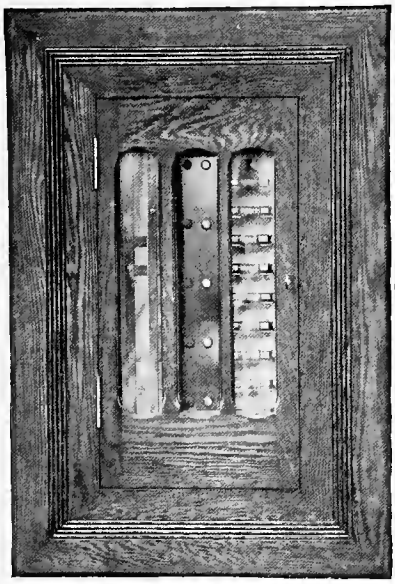
Building Construction

5 West Thirty-first Street

New York

ALSO THE FOLLOWING CARRÈRE & HASTINGS BUILDINGS

MURRY GUGGENHEIM, ELBERON, N. J.	GENL. CONSTR AND SPECIAL INTERIOR
CHAS. F. HOFFMAN, NEW YORK	SPECIAL INTERIOR
JOHN M. CARRÈRE, WHITE PLAINS, N. Y.	GENL. CONSTR. AND SPECIAL INTERIOR
ELY SCHOOL, GREENWICH, CONN.	" " " " "
MRS. RICHARD GAMBRILL, NEW YORK	SPECIAL INTERIOR
DANIEL GUGGENHEIM, ELBERON, N. J.	GENL. CONSTR. AND SPECIAL INTERIOR
ROCKEFELLER HALL, CORNELL UNIVERSITY	" "
FIRST NATIONAL BANK, PATERSON, N. J.	SPECIAL INTERIOR
CARNEGIE LIBRARY NO. 5, NEW YORK	GENERAL CONSTRUCTION



Patent applied for

M. & M. PANEL BOARDS

Multiple Push Button Switch Type

Circuits controlled from outside of cabinet by either push button or lock switches.

No danger of contact with live parts.

Directory of circuits can be engraved on the face plate.

Defective switch can be replaced from the front of panel.

Especially adapted for large residences, controlling all lights in dining room, hallways, ball room, etc., from rear stair hall.

Also adapted for churches, clubs, etc.

A foolproof panel.

Specify it for your next installation.

Further data and prices on receipt of inquiry.

Machen & Mayer Electrical Mfg. Company

17th and VINE STREETS : : : PHILADELPHIA, PA.

PROGRESS IN PUBLICITY

is rapid and sure. **Tabloid Circulars,** as they are to be published in the Record and Guide, are a modern and logical development.

SEND FOR SAMPLE SHEETS

THE RECORD AND GUIDE CO., 11 East 24th Street, N. Y.

An Index to the Advertisements

Alexander, H. 89
American Audit Co..... 72
American Bridge Co..... 50
*American Enameled Brick & Tile Co. 105
*American Luxfer Prism Co., 3d Cover
American Radiator Co..... 1
American School of Correspondence 71, 115
*American Steel & Wire Co...123
American Typewriter Co.....149
A. P. W. Paper Co..... 74
Architectural Decorating Co..113
*Architects Standard Bronze Co 4
*Armstrong Cork Co.....104
*Art Metal Construction Co... 66
*Atlantic Terra Cotta Co..... 99
*Atlas Portland Cement Co...133
Atlas Roofing Co.....129
Austin Organ Co..... 33

Baker Ice-Machine Co..... 71
*Barber Asphalt Paving Co..... 2
*Barrett Mfg. Co..... 23
Batterson & Eisele 14
Beck & Co., Fr..... 67
Bedford Quarries 44, 45
*Berger Mfg. Co..... 77
*Bird, F. W. & Son..... 75
Bohbink & Atkins.....126
Bollentin & Thompson..... 36
*Bostwick Steel Lath Co.....121
Boughton & Co..... 64
Boyle & Co.....110
*Bradford Pressed Brick Co.. 73
Breneman, C. W..... 38
*Bridgeport Wood Finishing Co 62
Brussell, Dennis G..... 86
*Burt Mfg. Co..... 6

*Cabot, Inc., Samuel.....114
*Cahill Iron Works.....149
Caldwell Mfg. Co.....126
Carrier Air Conditioning Co.. 92
*Carrier Lumber & Mfg. Co., 90, 91
*Carter White Lead Co..... 63
*Chamberlin Metal Weather Strip Co. 94, 95
*Chicago Spring Butt Co..... 76
Clark Co., C. Everett..... 70
*Cleveland Art Metal Co..... 96
Cleveland Vacuum Machy Co.102
*Clinton Wire Cloth Co..108, 109
*Clow & Sons, J. B.....143
*Columbus Heating & Ventilating Co. 107
*Consolidated Rosendale Cement Co. 134
*Corcoran, A. J.....131
Cornell Co., W. G.....Insert
Corrugated Bar Co.....120
Cuozzo, Donato 28

Dahlquist Mfg. Co.....137
*Dahlstrom Metallic Door Co.. 57
Davenport Co., A. H..... 39
Decorators' Supply Co..... 66
*Detroit Show Case Co.....116
*Detroit Steel Products Co.... 59
Dodge Co., F. W....42, 130, 142

*Economy Drawing Table Co.. 68
*Edison Portland Cement.111, 134

*Edwards Mfg. Co..... 27
Erkins Co. 96
Estey Wire Mfg. Co.....100
Eureka Fire Hose Mfg. Co.. 70

*Fischer & Jirouch..... 31
Fiske & Co..... 73
*Flour City Ornamental Iron Works 69
Foster Electr. Co., M. B.....115
*Fox & Co., M. Ewing..... 62

Gardiner & Son.....116
*Garry Iron & Steel Co.....120
Gensch Co., H.....113
Glauber Brass Mfg. Co.....142
*Glidden Varnish Co.....62, 75
*Globe-Wernicke Co..... 69
*Gorham Co..... 35
Gorton & Lidgerwood Co.....126
*Graf Mfg. Co..... 31
*Grauer & Co., A.....117
*Guastavino Co., R.....10, 11
*Gulf Red Cedar Co..... 52

*Hahl Automatic Clock Co.... 68
*Hardtmuth, L. & C..116, 126, 136
Harrison Eng. Co..... 87
*Hart Mfg. Co..... 76
*Hecla Iron Works..... 68
Herring-Hall-Marvin Safe Co., 12, 13
*Hess Warming & Ventilating Co..... 96
Higgins & Co., Chas. M..... 74
*Hill-Canton Dryer Co.....Insert
*Himmelberger-Harrison Lumber Co.....90, 91
Hosford Co., L D.....116
*Howard Clock Co..... 34
Howard & Morse..... 86
Howes, Benj. A.....132
*Humphrey Co.....118
Hussey & Co.....110

*Ideal Mfg. Co..... 78
Illinois Central R. R.....114
Illinois Heater Mfg. Co..... 67
*Imperial Brass Mfg. Co.....147
International Press Clipping Bureau 74

Jackson & Co., Edwin A..... 24
*Jackson Co., W. H.....8, 9
Jeffery & Co.....150
Jenkins Bros. 142
*Johnson Co., E. J..... 27
Johnson & Sherwin..... 70

Karpen, S. & Bro..... 98
*Keasbey & Mattison Co..... 51
*Keller Mfg. Co..... 2
*Kelsey Heating Co..... 38
*Kennedy, David E., Inc.4th Cover
*Kewanee Boiler Co.....138
*Kewanee Water Supply Co.... 56

*Lamb-Fish Lumber Co.....90, 91
*Lasar-Letzig Mfg. Co..... 34
Lawrence Cement Co.....135
Lehigh Portland Cement Co..134
*Lord & Taylor 37
*Luehrmann Hardwood Lumber Co., Chas. F.....90, 91
Lufkin Rule Co.....126
*Lynn-Superior Co.....110

*McCray Refrigerator Co..... 93
*McCrum-Howell Co.....139
Machem & Mayer Elec. Mfg. Co. 17
*Majestic Furnace & Foundry Co. 28
*Marine Eng. & Mach. Co..... 92
Manhattan Brass Co..... 28
Manhattan Iron Works..... 96
Matheson Lead Co.....Insert
Mengel & Bro. Co., C. C.... 53
*Meurer Bros. Co..... 79
*Morgan Co. 103
Moses, L. 78
*Muckenhirn Closet Co.....142
*Mueller, H. Mfg. Co.....151
*Mullins Co., W. H..... 98

*National Dictograph Co..... 81
*National Fire Proofing Co....124
*National Lead Co..... 61
National Meter Co..... 79
*Nelson Co., C. T..... 74
*Never-Split Seat Co.....144
Non-Staining Cement Co.....128
Norcross Bros..... 58
*Northwestern Terra Cotta Co. 78

*Ohio Elevator & Machine Co. 77
*Otis Elevator Co.....82, 83

Parker, Preston & Co.....116
Pearlman & Co., V. S..... 66
*Peele Co. 6
Persian Rug Mfty..... 67
*Phila. & Boston Face Brick Co.118
Pierce, Butler & Pierce Mfg. Co. 138
*Pittsburgh Gage & Supply Co.112

*Rackle & Sons Co., Geo..... 97
*Rapp Co., John W..... 60
Record & Guide.....32, 130
*Reliance Ball-Bearing Door Hanger Co. 102
*Richards Mfg. Co..... 93
Richardson & Boynton Co...127
Richardson Engineering Co..126
*Ridgway Dynamo & Engine Co. 86
*Rinald Bros. 126
*Rixson Co., Oscar C.....114
Roberts Filter Co..... 30
*Rockland-Rockport Lime Co. 80
Roebling Construction Co.... 46
*Rookwood Pottery Co..... 43
*Royal Ventilator & Mfg. Co., 40, 41
Russell & Erwin Mfg. Co.... 49
*Rutland-Florence Marble Co., 84, 85

*Sagax Wood Co..... 28
*Samson Cordage Works.....126
Sandusky Portland Cement Co.135
Sanitary Co. 146
*Sayre & Fisher Co..... 72
Schick-Johnson Co..... 2
Schreiber, L. & Sons Co..... 60
Seifert Plastic Relief Co., F. A. 113
*Sharon Steel Hoop Co.....125
Silver Lake Co.....126
Shaefer, Jr., & Co., John.... 16
Smith & Egge Mfg. Co.....118
*Soss Mfg. Co..... 30
*Standard Varnish Co..... 19
Stearns Lumber Co., A. T.... 76
*Stebbins Mfg. Co.....141
Steinway & Sons..... 55
Stevens & Co..... 64
*Stewart Iron Works.....130
Stromberg-Carlson Tel. Mfg. Co. 15
"Sweets" 148
*Syracuse Corner Block Factory 126

Tablet & Ticket Co..... 78
*Taylor Co., N. & G.....117
Taylor, Ronald 87
Thatcher Furnace Co.....137
*Thomas & Smith, Inc.....119
*Thomson Wood Finishing Co., 104, 110
*Thorp Fire Proof Door Co... 54
*Three States Lumber Co., The, 90, 91
Trageser Steam Copper Works.142
*Trenton Potteries Co.....145
*Trussed Concrete Steel Co....122

Universal Portland Cement Co.132

*Vacuum Eng. Co.....136
*Van Dorn Iron Works Co..... 68
*Vermont Marble Co.....126
*Voigtmann & Co.....118
Vreeland Building Co., J. C... 88

Wallace, N.....130
*Warren Bros. Co.....106
*Waterproofing Co., The.....127
*Western Electric Co.....101
White Enamel Refrigerator Co. 141
*White Fireproof Construction Co. .....2d Cover
Wilks Mfg. Co., S.....137
Wiliams, B. A. & G. N..... 29
*Williams, Inc., John..... 7
Wilson, A. & S.....119
*Winslow Bros. Co..... 5
*Wirt & Knox Mfg. Co..... 66
Wolff Mfg. Co., L.....152
*Wood Mfg. Co., John.....136
*Wood Mosaic Flooring Co.... 76

Yale & Towne Mfg. Co..... 3

Catalogue of concerns marked * will be found in the 1910 Edition "Sweet's" Catalogue of Building Construction.

Durability and Beauty in Floor Finish

Floors finished with Elastica Floor Finish are satisfactory after they have been used as well as when the Elastica is first applied.

Floors finished with many other floor finishes look well only before they are used.

The purpose for which the room is to be used or the kind of flooring makes no difference—Elastica Floor Finish has proved itself in the severest possible tests.

TRADE ELASTICA MARK.

FLOOR FINISH

beautifies all woods. It is a genuine finish.

It is the kind of a floor finish that ought to appeal to you.

Elastica Floor Finish combines **Durability** and **Beauty,** which is equivalent to **complete satisfaction.**

Elastica Floor Finish is worthy your consideration.

May we send your further particulars?

STANDARD VARNISH WORKS

CHICAGO **NEW YORK** **LONDON**
BERLIN **BRUSSELS**

Canadian Branch: International Varnish Co., Ltd., Toronto

A Directory for Architectural Specifications

For Alphabetical List of Advertisers, see page 18.

Air Washers.
Carrier Air Conditioning Co. of America, 39 Cortlandt St., N. Y. C.; Buffalo, N. Y.
Thomas and Smith, Chicago; New York.

Architectural Faience.
Rookwood Pottery, Cincinnati, O.; 1 Madison Ave., N. Y. C.

Architectural Sheet and Metal Work.
W. H. Mullins Co., Salem, O.

Architectural Supplies.
Economy Drawing Table Co., Toledo, O.
Hardtmuth, L. & C., 34 East 23d St., N. Y. C.
Lufkin Rule Co., Saginaw, Mich.

Architectural Wood Work.
Hartmann-Sanders Co., Elston and Webster Aves., Chicago, Ill.; N. Y. office, 1123 Bway.

Asbestos Roofing and Sheathing.
Keasbey & Mattison Co., Ambler, Pa.

Asphalt.
Barber Asphalt Paving Co., Philadelphia, Pa.

Automatic Clocks.
Hahl Automatic Clock Co., Schiller Bldg., Chicago, Ill.; 103 Park Ave., N. Y. City.

Automobiles.
Thomas B. Jeffery & Co., Kenosha, Wis.

Automobile Electric Charging Apparatus.
Richardson Engineering Co., Hartford, Conn.

Bedford Stone.
Bedford Quarries Co., Chicago, Ill.

Blackboards.
E. J. Johnson Co., 38 Park Row, N. Y. C.

Boilers.
American Radiator Co., Chicago.
Dahlquist Mfg. Co., So. Boston, Mass.
Gorton & Lidgerwood Co., 96 Liberty St., N.Y. C.
Kewanee Boiler Co., Kewanee, Ill.
McCrum-Howell Co., Park Ave. & 41st St., N. Y. C.
Pierce, Butler & Pierce Mfg. Co., Syracuse, N. Y.
Richardson & Boynton Co., Boston, New York, Chicago.
Thatcher Furnace Co., 110 Beekman St., N.Y.C.
Wood Mfg. Co., John, Conshohocken, Pa.

Brass and Bronze Workers.
Architects Standard Bronze Co., 1 Madison Ave., N. Y. C.
Cleveland Art Metal Co., Cleveland, O.
Flour City Ornamental Iron Works, Minneapolis.
Gorham Co., New York City; Providence, R. I.
Hecla Iron Works, N. 11th and Berry Sts., Brooklyn, N. Y.
Edwin A. Jackson & Bro., 49 Beekman St., N.Y.
W. H. Jackson Co., 29 E. 17th St., N. Y. C.
Lasar-Letzig Mfg. So., St. Louis, Mo.
L. Schreiber & Sons Co., Cincinnati, O.
Jno. Williams, Inc., 556 W. 27th St., N. Y. C.
Winslow Bros. Co., Chicago; N. Y. Office, 160 5th Ave.

Brick.
Fiske & Co., Flatiron Bldg., N. Y. C.
Bradford Pressed Brick Co., Bradford, Pa.
Phila. & Boston Face Brick Co., Boston, Mass.
Sayre & Fisher Co., 207 B'way, N. Y. C.

Brick Stains.
Parker, Preston & Co., Norwich, Conn.

Builders.
C. Everett Clark Co., 100 Washington St., Chicago.
A. & S. Wilson Co., Pittsburg, Pa.

Building Reports.
Dodge Co., F. W., New York.

Cabinets, Filing.
Globe-Wernicke Co., Cincinnati, O.

Calcimines.
M. E. Fox & Co., 136th St. & Rider Ave., N.Y.C.

Caps for Columns and Pilasters.
Hartmann-Sanders Co., Elston and Webster Aves., Chicago, Ill.; N. Y. Office, 1123 B'way.

Casement Window Adjuster.
Oscar C. Rixson Co., 111 W. Harrison St., Chicago, Ill.

Cedar (Red).
Gulf Red Cedar Co., Richmond, Va.

Ceilings, Metal.
Edwards Mfg. Company, Cincinnati, O.

Cement.
Atlas Portland Cement Co., 30 Broad St., N.Y.C.
Consolidated Rosendale Cement Co., 50 Church St., N. Y. C.
Edison Port. Cement Co., 1123 Broadway, N. Y.
Lawrence Cement Co., 1 Broadway, N. Y. C.
Lehigh Portland Cement Co., Allentown, Pa.
Non-Staining Cement Co., 156 5th Ave., N. Y. C.
Sandusky Portland Cement Co., Sandusky, O.
Universal Portland Cement Co., Commercial Nat'l Bank Bldg., Chicago

Cement Waterproof Compound.
Sandusky Portland Cement Co., Sandusky, O.

Changeable Bulletin Board.
Tablet & Ticket Co., 381 Broadway, N. Y. C.; Chicago; San Francisco.

Chutes (Coal, Wood and Vegetable).
Majestic Furnace & Foundry Co., Huntington, Ind.

Clocks (Automatic).
Hahl Automatic Clock Co., Schiller Bldg., Chicago, Ill.; 103 Park Ave., N. Y. C.

Clothes Dryer.
Hill-Canton Dryer Co., Worcester, Mass.; 1133 Broadway, N. Y. C.; Canton, Ohio.

Columns (Lock Joint).
Hartmann-Sanders Co., Elston and Webster Aves., Chicago, Ill.; N. Y. office, 1123 B'way.
C. T. Nelson Co., Columbus, O.

Columns (Wood and Cement).
Decorators' Supply Co., Archer Ave. & Leo St., Chicago; 123 Fourth Ave., N. Y. C.

Composition (Capitals and Ornaments).
Architectural Decorating Co., 643 S. Jefferson St., Chicago.
Decorators Supply Co., Archer Ave. & Leo St., Chicago; 123 Fourth Ave., N. Y. C.

Concrete Construction, Reinforced.
American Steel & Wire Co., Chicago, New York, Denver, San Francisco.
Corrugated Bar Co., Bank of Commerce Bldg., St. Louis.
Howes, Benj. A., 15 W. 38th St., N. Y. C.
Trussed Concrete Steel Co., Detroit, Mich.
Vaughan Co., 145 La Salle St., Chicago, Ill.

Concrete Stairs.
White Fireproof Construction Co., 1 Madison Ave., N. Y. C.

Consulting Electrical Engineers.
Richardson Engineering Co., Hartford, Conn.

Contracting Electrical Engineers.
Dennis G. Brussel, 15 W. 29th St., N. Y. C.
Richardson Engineering Co., Hartford, Conn.
Western Electric Co., New York.

Cooling Rooms.
McCray Refrigerator Co., Kendallville, Ind.

Copper Work.
Dahlquist Mfg. Co., So. Boston, Mass.
John Trageser Steam Copper Works, 447 W. 26th St., N. Y. C.

Cork.
Armstrong Cork Co., Pittsburgh, Pa.

Corner Blocks.
Syracuse Corner Block Factory, Syracuse, N. Y

Cork Tiling.
David E. Kennedy, Inc., 420 5th Ave., N. Y. C.

Corner Bead.
Sharon Steel Hoop Co., Mfrs., c/o Fuller Bros. & Co., 139 Greenwich St., N. Y. C.; Chicago office: Commercial Nat. Bank Bldg.

"Waterproofing by the Positive Seal Method"

This is a booklet in which every architect and engineer will be interested. It gives detailed information regarding the most approved methods of underground waterproofing, based on expert technical knowledge and broad experience.

The Genasco Positive Seal materials include:

Positive Seal Felt, an asphalt-coated felt of high tensile strength.

Positive Seal Fabric, for use where unusual strength is required to withstand incessant vibration or excessive contraction and expansion.

Positive Seal Solid Cement, applied hot either alone or as a ply cement with the felt or fabric, depending upon the conditions to be met.

Positive Seal Liquid Cement. A substitute for Positive Seal Solid Cement where there are no facilities for heating the latter.

Positive Seal Paint No. 1. A dampproofing paint for brick, stone or concrete, which may be plastered over without lathing or furring.

Positive Seal Paint No. 2. A priming coat for wood, masonry or steel, forming a perfect bond with Positive Seal Solid Cement when the latter is applied hot.

All these materials are fully described in the booklet, which will be mailed upon request.

THE BARBER ASPHALT PAVING CO.

Largest producers of asphalt in the world

PHILADELPHIA

New York San Francisco Chicago

Decorations (Plastic Relief).
Architectural Decorating Co., 643 S. Jefferson St., Chicago.
Decorators' Supply Co., Archer Ave. & Leo St., Chicago; San Francisco.
Fiecher & Jirouch, 1008 Scovill Ave., S. E., Cleveland, O.
Gensch Co., H., 1521 Eastwood Ave., Chicago.
Frank A. Seifert Plastic Relief Co., St. Louis, Mo.

Directory for Office Buildings.
Tablet & Ticket Co., 381 B'way, N. Y. C.; Chicago; San Francisco.

Door Hangers.
Reliance Ball Bearing Door Hanger Co., 1 Madison Ave., N. Y. C.
Richards Mfg. Co., Aurora, Ill.

Door Holder.
Caldwell Mfg. Co., 40 Jones St., Rochester, N.Y
Yale & Towne Mfg. Co., 9 Murray St., N. Y. C.

Doors.
Morgan Co., Oshkosh, Wis.

Drawing Inks.
Charles M. Higgins Co., Main Office, 271 9th St., Brooklyn, N. Y.

Dynamos.
Ridgway Dynamo & Engine Co., Ridgway, Pa.
Western Electric Co., New York.

Electrical Engineers.
Dennis G. Brussel, 15 W. 29th St., N. Y. C.
Richardson Engineering Co., Hartford, Conn.

Electrical Equipment.
Dennis G. Brussel, 15 W. 29th St., N. Y. C.
Hart Mfg. Co., Hartford, Conn.
Richardson Engineering Co., Hartford, Conn.
Ridgway Dynamo & Engine Co., Ridgway, Pa.
Western Electric Co., New York.

Electric Lighting Equipment.
Richardson Engineering Co., Hartford, Conn.

Electric Pumps.
Hart Mfg. Co., Hartford, Conn.

Electric Receptacles & Switches.
Hart Mfg. Co., Hartford, Conn.

Elevators.
Ohio Elevator & Machine Co., Columbus, O.
Otis Elevator Co., 17 Battery Pl., N. Y. C.

Enameled Brick.
Amer. Enameled Brick & Tile Co., 1 Madison Ave., N. Y. C.
Sayre & Fisher Co., 207 B'way, N. Y. C.

Enamel Paint.
Lowe Bros. Co., Dayton, Ohio.
Rinald Bros., 1142 North Hancock St., Philadelphia, Pa.
Thomson Wood Finishing Co., Philadelphia.

Engineers and Contractors.
American Bridge Co., Hudson Terminal, 30 Church St., N. Y. C.; Frick Bldg., Pittsburg, Pa.; Monadnock Block, Chicago; Third Nat'l Bank Bldg., St. Louis; 141 Milk St., Boston.
Howes, Benj. A., 15 W. 38th St., N. Y. C.
A. & S. Wilson Co., Pittsburg, Pa.
The Waterproofing Co., New York, Boston, Pittsburg.

Expanded Metal.
Garry Iron & Steel Co., Cleveland, O.

Finishes (Wood).
Bridgeport Wood Finishing Co., New Milford, Conn.

Fireplace Fixtures.
Edwin A. Jackson & Bro., 49 Beekman St., N. Y. C.
W. H. Jackson Co., 29 E. 17th St., N. Y. C.

Fireproof Doors and Shutters.
Dahlstrom Metallic Door Co., Jamestown, N. Y.
John W. Rapp Co., 1 Madison Ave., N. Y. C.
Sagax Wood Co., Baltimore, Md.
Thorp Fireproof Door Co., Minneapolis, Minn.

Fireproof Paint.
M. Ewing Fox & Co., 136th St. and Rider Ave., New York and Chicago.

Fireproof Windows.
American Luxfer Prism Co., Chicago; N. Y. Office, 507-509 W. Broadway; Boston, Mass.
Detroit Steel Products Co., Detroit, Mich.; 2 Rector St., N. Y. C.
W. H. Mullins Co., Salem, Ohio.
John W. Rapp Co., 1 Madison Ave., N. Y. C.
Voigtmann & Co., Chicago and New York.

Fireproofing.
American Steel & Wire Co., Chicago, New York, Denver, San Francisco.
Hecla Iron Works, N. 11th and Berry Sts., Brooklyn, N. Y.
National Fireproofing Co., Commercial Nat'l Bank Bldg., Chicago, Ill.
Roebling Construction Co., Fuller Bldg., N.Y.C.
Thorp Fireproof Door Co., Minneapolis, Minn.
Trussed Concrete Steel Co., Detroit, Mich.
White Fireproof Construction Co., 1 Madison Ave., N. Y. C.

Floor Tiling.
David E. Kennedy, Inc., 420 5th Ave., N. Y. C.
Phila. & Boston Face Brick Co., Boston, Mass.

Furnaces and Ranges.
Richardson & Boynton Co., Boston, New York, Chicago.
Thatcher Furnace Co., 110 Beekman St., N.Y.C.

Furniture.
Berkey & Gay Furn. Co., Grand Rapids, Mich.
S. Karpen & Bros., 187 Michigan Ave., Chicago; 155 W. 34th St., N. Y. C.
Mayhew Co., Milwaukee, Wis.

Garbage Crematory.
S. Wilks Mfg. Co., 3535 Shields Ave., Chicago,

Greenhouses.
A. T. Stearns Lumber Co., Neponset, Boston

Grilles (Wood).
Decorators' Supply Co., Archer Ave. & Leo St., Chicago; 123 Fourth Ave., N. Y. C.

Gutters (Wood).
A. T. Stearns Lumber Co., Neponset, Boston,

Hardware.
Chicago Spring Butt Co., Chicago and N. Y. C.
Richards Mfg. Co., Aurora, Ill.
Russell & Erwin Mfg. Co., New Britain, Conn.; N. Y. Office, 26 W. 26th St.; Chicago, Philadelphia and San Francisco.
Yale & Towne Mfg. Co., 9 Murray St., N. Y. C.

Hardwood Floors.
Wood-Mosaic Flooring Co., Rochester, N. Y.

Heat Regulation.
Illinois Heater Mfg. Co., Chicago, Ill.

Heating Apparatus.
American Radiator Co., Chicago.
Gorton & Lidgerwood Co., 96 Liberty St., N.Y.C.
Harrison Eng. Co., 42 E. 23d St., N. Y. C.
Illinois Heater Mfg. Co., Chicago, Ill.
Kelsey Heating Co., Syracuse, N. Y.
McCrum-Howell Co., Park Ave. & 41st St., N.Y.C.
Pierce, Butler & Pierce Mfg. Co., Syracuse, New York, Boston and Philadelphia.
Thatcher Furnace Co., 110 Beekman St., N.Y.C.

Hinges and Butts.
Chicago Spring Butt Co., Chicago and N. Y. C.
Yale & Towne Mfg. Co., 9 Murray St., N. Y. C.

Hose (Fire).
Eureka Fire Hose Mfg. Co., 13 Barclay St., N. Y. C.

Hose-Rack.
Wirt & Knox Mfg. Co., North 4th St., Phila, Pa.

Ice Boxes.
McCray Refrigerator Co., Kendallville, Ind.

Ice Machinery.
Baker Ice Machine Co., Omaha, Neb.

Indiana Limestone.
Bedford Quarries Co., Chicago, Ill.

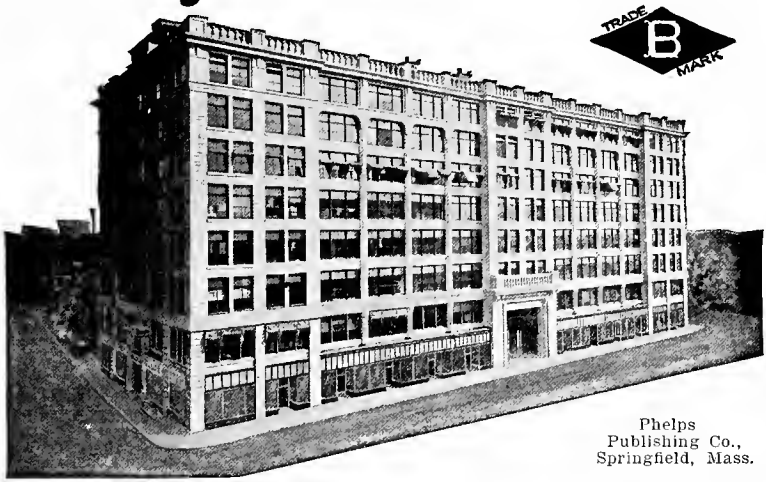
Interior Woodwork.
Morgan Co., Oshkosh, Wis.
A. T. Stearns Lumber Co., Neponset, Boston,

Iron Bases.
Syracuse Corner Block Factory, Syracuse, N. Y.

Iron and Metal Workers.
Flour City Ornamental Iron Works, Minneapolis,
Hecla Iron Works, N. 11th and Berry Sts., Brooklyn, N. Y.
W. H. Mullins Co., Salem, Ohio.
L. Schreiber & Sons Co., Cincinnati, O.
Stewart Iron Works Co., Cincinnati, Ohio.
Jno. Williams, Inc., 556 W. 27th St., N. Y. C.
Winslow Bros. Co., Chicago; N. Y. Office, 160 5th Ave.

Kalsomine.
M. Ewing Fox & Co., 136th St. and Rider Ave., N. Y. C.; 53-55 E. Lake St., Chicago.

Barrett Specification Roofs



Phelps
Publishing Co.,
Springfield, Mass.

Insist that the Specification be Followed!

For certainty of results, specify that your building shall be roofed "*according to The Barrett Specification.*"

Don't specify in general terms.

Don't say "a Gravel roof," or "a Pitch and Gravel roof," or "a Slag roof," or "a Tar roof"—that is inviting trouble. Say "according to The Barrett Specification." Insist that the full specification be followed.

That means you are ordering something *definite.* It makes slipshod workmanship easy to detect. It requires the use of the proper weight of felt and the proper grade and amount of pitch.

A Barrett Specification roof is certain to last 20 years and more. We know of many cases where such roofs have lasted over 30 years *without costing a cent for maintenance.*

The Barrett Specification prescribes with precision the way such a roof should be laid to give *maximum service.* It is a practical specification and to-day is used and endorsed by the leading architects and engineers. It is not based on academic theory, but on the best practice of the day.

Every engineer, architect and owner of buildings, should have The Barrett Specification on file. Copies of it will be sent free on request. Address our nearest office.

BARRETT MANUFACTURING COMPANY

New York Chicago Philadelphia Boston Cleveland Pittsburg Cincinnati
Kansas City Minneapolis New Orleans St. Louis London, Eng.

Lath (Metal).
Bostwick Steel Co., Niles, O.
Garry Iron & Steel Co., Cleveland, O.
Truased Concrete Steel Co., Detroit, Mich.

Lighting and Power Plants.
Dennis G. Brussel, 15 W. 29th St., N. Y. C.
Richardson Engineering Co., Hartford, Conn

Lighting Fixtures.
Architects Standard Bronze Co., 1 Madison Ave., N. Y. C.
Pearlman & Co., V. S., 10 E. Adams St., Chicago, Ill.

Lightning Conductors.
N. Wallace, Farmington, Conn.

Limestone.
Badford Quarries Co., Chicago, Ill.

Locks.
Yale & Towne Mfg. Co., 9 Murray St., N. Y. C.

Lockers (Metal).
Van Dorn Iron Works Co., Cleveland, O.

Mahogany.
C. C. Mengel & Bro. Co., Louisville, Ky.

Mantels.
Edwin A. Jackson & Bro., 49 Beekman St., N. Y. C.
W. H. Jackson Co., 29 E. 17th St., N. Y. C.; Foundry and Shops, 229-239 W. 28th St.

Mantels (Brick.)
Phila. & Boston Face Brick Co., Boston, Mass.

Marble.
Rutland-Florence Marble Co., Fowler, Vt.

Measuring Tapes.
Lufkin Rule Co., Saginaw, Mich.

Medicine Cabinet.
Hess Warming & Ventilating Co., Tacoma Bldg., Chicago, Ill.

Metal Corner.
Sharon Steel Hoop Co., Mfrs., c/o Fuller Bros. & Co., 139 Greenwich St., N. Y. C.; Chicago office: Commercial Nat. Bank Bldg.

Metal-Covered Doors and Trim.
Thorp Fireproof Door Co., Minneapolis, Minn.
John W. Rapp Co., 1 Madison Ave., N. Y. C.

JACKSON
Ventilating Grate

THE only open grate that warms and brings in outdoor air, and takes out the air of the room that is impure. It is a constant and perfect ventilator, having a fresh air supply on the principle of the hot-air furnace. Will heat rooms on two floors if desired, and will burn coal, wood or gas. Keeps fire from fall to spring.

Made in many patterns, to fit any fireplace. Catalogue No. 1 shows styles and prices. May we send you a copy?

Special Catalogue of Mantels, Andirons and Fireplace Fittings sent upon request.

E. A. JACKSON & BRO., 49 Beekman St., New York

Metal Furniture.
Van Dorn Iron Works Co., Cleveland, Ohio.

Metal Lath.
Bostwick Steel Co., Niles, O.
Edwards Mfg. Company, Cincinnati, O.
White Fireproof Construction Co., 1 Madison Ave., N. Y. C.

Metal Lumber.
Berger Mfg. Co., Canton, O.

Metal Roofing.
Edwards Mfg. Company, Cincinnati, O.
N. & G. Taylor Co., Philadelphia, Pa.

Metal Store Front Construction.
Detroit Show Case Co., Detroit, Mich.

Metal Tile.
Edwards Mfg. Company, Cincinnati, Ohio.

Metal Weather-strips.
Chamberlin Metal Weather Strip Co., Detroit,

Mortar Colors.
Garry Iron & Steel Co., Cleveland, O.

Mosaic Wood Floors.
Wood-Mosaic Flooring Co., Rochestar, N. Y.

Motors (Electric).
Ridgway Dynamo & Engine Co., Ridgway, Pa.
Western Electric Co., New York.

Nursery Stock.
Bobbink & Atkins, Rutherford, N. J.

Ornamental Brick.
Phila. & Boston Face Brick Co., Boston, Mass.

Ornamental Ironwork.
Cleveland Art Metal Co., Cleveland, O.
Lasar-Letzig Mfg. Co., St. Louis, Mo.
L. Schreiber & Sons Co., Cincinnati, O.
Stewart Iron Works Co., Cincinnati, Ohio.
Winslow Bros. Co., Chicago; N. Y. Office, 160 5th Ave.

Ornaments (Composition).
Decorators' Supply Co., Archer Ave. & Leo St., Chicago; 123 Fourth Ave., N. Y. C.
Fischer & Jirouch, 1008 Scovill Ave., S. E., Cleveland, O.
Gensch Co., H., 1521 Eastwood Ave., Chicago.
Frank A. Seifert Plastic Relief Co., St. Louis, Mo.

Padlocks.
Yale & Towne Mfg. Co., 9 Murray St., N. Y. C.

Paints.
Carter White Lead Co., Chicago, Ill.
M. Ewing Fox & Co., 136th St. and Rider Ave., N. Y. C.; 53-55 E. Lake St., Chicago.
Gardiner & Son, Geo. N., 15 William St., N.Y.C.
Lowe Bros. Co., Dayton, Ohio.
National Lead Co., 111 Broadway, N. Y. C.
Rinald Bros., 1142 N. Hancock St., Philadelphia.
The Thomson Wood Finishing Co., Phila., Pa.

Parquet Flooring.
Wood-Mosaic Flooring Co., Rochester, N. Y.

Pavement Filler.
Barrett Mfg. Co., 17 Battery Pl., N. Y. C.

Pianos (Special Cases to Order).
Steinway & Sons, 107 East 14th St., N. Y. C.

Pipe Covering.
Armstrong Cork Co., Pittsburgh, Pa.

Plumbing Fixtures.
Cahill Iron Works, Chattanooga, Tenn.
Clow & Sons, J. B., 342 Franklin Ave., Chicagn, Ill.
Columbus Heating & Ventilating Co., Columhus, O.
Glauber Brass Mfg. Co., Cleveland, O.
Imperial Brass Mfg. Co., Chicago, Ill.
McCrum-Howell Co., Park Ave. & 41st St., N.Y.C.
C. H. Muckenhirn Closet Co., Detroit, Mich.
H. Mueller Mfg. Co., Decatur, Ill.
Sanitary Co., Cleveland, O.
Stebbins Mfg. Co., Springfield, Mass.
John Trageser Steam Copper Works, 447 W. 26th St., N. Y. C.
Trenton Potteries Co., Trenton, N. J.
L. Wolff Mfg. Co., Chicago; Trenton, N. J.

Pneumatic Water Supply.
Kewanee Water Supply Co., Kewanee, Ill.

Porcelain Enameled Baths.
Cahill Iron Works, Chattanooga, Tenn.
L. Wolff Mfg. Co., Chicago.

Porcelain Enamel Paint.
Rinald Bros., 1142-1146 N. Hancock St., Philadelphia, Pa.

THIS IS THE "RESIDENCE SPECIAL"

Santo Vacuum Cleaner

Perfection — The Only Cleaner — Without a Fault

Different From All Other Cleaners

This machine is the result of many years of costly experiment to produce a high grade, low priced, economically operated cleaning plant for permanent installation. It is offered at a price within reach of every builder of a home.

The SANTO "RESIDENCE SPECIAL" is perfectly adapted to any number of rooms up to 20. It embodies the principles of our well known Santo Portable Cleaner, which is everywhere recognized as the standard of perfection in vacuum cleaners.

An Unequalled Combination

In the Santo "Residence Special" we offer a combination of high efficiency together with many other vital features which make up the most desirable and economical cleaning plant in the world for residence use.

It maintains a vacuum of over 8 inches of mercury and displaces over 40 cubic feet of air per minute—the amounts and proportion necessary for thorough cleaning. This efficiency—this perfect balance can not be obtained in any other cleaner.

This efficiency is obtained with a motor of only ¼ H.P., which is connected to the lighting circuit and operated at a cost of less than 4 cents per hour. No special service wires needed.

No noise or vibration in the house. The motor is connected direct to the powerful duplex pump with hall-bearing eccentrics. No gears, belts or chains. Nothing to get out of order. Requires oiling only 3 or 4 times a year.

This Cleaner cannot be equalled at any price.

This machine employs our well known system of dry separation which has been used for years with perfect satisfaction. Start or stop it from any number of floors or rooms by snap switches. No installation expense. No foundation. Simply connect with pipes and wires.

Height, 40 inches. Diameter at base, 23 inches. Weight, 175 lbs. Finished in cream white with black stripes. Complete equipment included.

Absolutely high grade. Fully guaranteed.

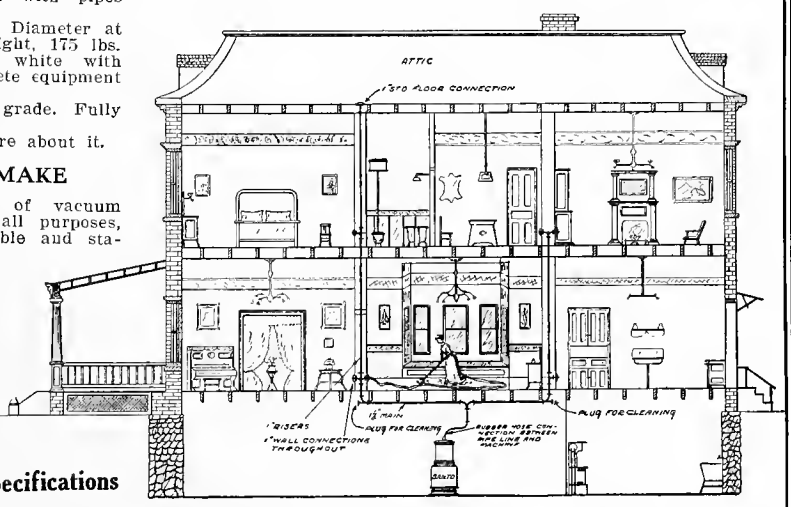
Let us tell you more about it.

WE ALSO MAKE

A complete line of vacuum cleaning plants for all purposes, including both portable and stationary types of one to fifty sweeper capacity.

We own and operate the largest factory in the world devoted to this business. Our engineering department is at your disposal, and will submit estimates promptly upon request.

PLAN OF FIRST FLOOR



Send Us Your Specifications

Keller Manufacturing Co., Dept. 2 AR, Philadelphia, Pa.

Porcelite Enamel Paint.
Thomson Wood Finishing Co., Philadelphia.

Prism Lighting.
American Luxfer Prism Co., Heyworth Bldg., Chicago; 507-509 West Broadway, N. Y. C.
Grauer & Co., Pittsburgh, Pa.

Radiators.
American Radiator Co., Chicago.
McCrum-Howell Co., Park Ave. & 41st St., N.Y.C.
Pierce Butler & Pierce Mfg. Co., Syracuse, N. Y.

Red Cedar.
Gulf Red Cedar Co., Richmond, Va.

Red Gum.
Carrier Lumber & Mfg. Co., Sardis, Miss.
Himmelberger-Harrison Lumber Co., Morehouse, Mo.
Lamb-Fish Lumber Co., Memphis, Tenn.
Chas. F. Luehrmann Hardwood Lumber Co., St. Louis, Mo.
Three States Lumber Co., Memphis, Tenn.

Red Lead.
National Lead Co., 111 Broadway, N. Y. C.

Refrigerators.
McCray Refrigerator Co., Kendallville, Ind.

Reports (Building).
Dodge Co., F. W., New York.

Roofing (Metal, Slate and Tile).
Atlas Roofing Co., Newburgh, N. Y.
Barber Asphalt Paving Co., Philadelphia, Pa.
Barrett Mfg. Co., 17 Battery Pl., N. Y. C.
F. W. Bird & Son, East Walpole, Mass.
E J. Johnson Co., 38 Park Row, N. Y. C.
Keasbey & Mattison Co., Ambler, Pa.
National Roofing Tile Co., Lima, Ohio.
N. & G. Taylor Co., Chestnut and 3d Sts., Philadelphia, Pa.; N. Y. Office, 1123 Broadway.

Rules.
Lufkin Rule Co., Saginaw, Mich.

Sanitary Plumbing Appliances.
Cahill Iron Works, Chattanooga, Tenn.
Clow & Sons, J. B., 342 Franklin Ave., Chicago, Ill.
Columbus Heating & Ventilating Co., Columbus, O.
Glauber Brass Mfg. Co., Cleveland, O.
Imperial Brass Mfg. Co., Chicago, Ill.
C. H. Muckenhirn Closet Co., Detroit, Mich.
H. Mueller Mfg. Co., Decatur, Ill.
Never-Split Seat Co., Evansville, Ind.
Pierce, Butler & Pierce Mfg. Co., Syracuse, New York, Boston and Philadelphia.
Sanitary Co., Cleveland, O.
Stebbins Mfg. Co., Springfield, Mass.
John Trageser Steam Copper Works, 447 W. 26th St., N. Y. C.
Trenton Potteries Co., Trenton, N. J.
L. Wolff Mfg. Co., Chicago; Trenton, N. J.

Sash.
Morgan Co., Oshkosh, Wis.

Sash Chain.
Smith & Egge Mfg. Co., Bridgeport, Conn.

Sash Cord.
Samson Cordage Works, Boston, Mass.
Silver Lake Co., Boston, Mass.

Sash, for Industrial Buildings.
Detroit Steel Products Co., Detroit, Mich.

Shades, Window.
C. W. Breneman & Co., 2069 Reading Road, Cincinnati, O.

Sheathing (Asbestos).
Keasbey & Mattison Co., Ambler, Pa.

Sheathing Papers.
Barrett Mfg. Co., 17 Battery Pl., N. Y. C.
F. W. Bird & Son, East Walpole, Mass.

Sheet Metal Work.
Atlas Roofing Co., Newburgh, N. Y.
Berger Mfg. Co., Canton, O.
Burt Mfg. Co., Akron, Ohio.

Shingle Stains.
Samuel Cabot, 141 Milk St., Boston, Mass.
Parker, Preston & Co., Norwich, Conn.

Sidewalk Lights.
Grauer & Co., Pittsburgh, Pa.

Skylights.
Atlas Roofing Co., Newburgh, N. Y.
Burt Mfg. Co., Akron, Ohio.

Snow Guards.
Folsom Snow Guard Co., Boston, Mass.

Sound Deadeners.
F. W. Bird & Son, East Walpole, Mass.
Samuel Cabot, 141 Milk St., Boston, Mass.

Stainless Portland Cement (Pure White).
Sandusky Portland Cement Co., Sandusky, O.

Steam and Hot-Water Heating.
Pierce, Butler & Pierce Mfg. Co., Syracuse, New York, Boston and Philadelphia.
Thatcher Furnace Co., 110 Beekman St., N.Y.C.

Steam Engines.
Ridgway Dynamo & Engine Co., Ridgway, Pa.

Steel Cabinets.
Art Metal Construction Co., Jamestown, N. Y.

Steel Sash.
Detroit Steel Products Co., Detroit, Mich.

Stone (Artificial).
Geo. Rackle & Sons Co., Cleveland, O.

Structural Iron and Steel.
American Bridge Co., Hudson Terminal, 30 Church St., N. Y. C.; Frick Bldg., Pittsburg, Pa.; Monadnock Block, Chicago; Third Nat'l Bank Bldg., St. Louis; 141 Milk St., Boston.

Systems, Filing.
Globe-Wernicke Co., Cincinnati, O.

Telephones (Automatic Intercommunic'g).
National Dictograph Co., 1265 B'way, N. Y. C.
Stromberg-Carlson Tel. Mfg. Co., Rochester, N. Y.; Chicago, Ill.; Kansas City, Mo.
Western Electric Co., New York.

Terra Cotta.
National Fireproofing Co., Commercial Nat'l Bank Bldg., Chicago, Ill.
Northwestern Terra Cotta Co., 1000 Claybourn Ave., Chicago, Ill.

Tile (Cork).
David E. Kennedy, Inc., 420 5th Ave., N. Y. C.

Tile, Metal.
Edwards Mfg. Company, Cincinnati, Ohio.

Tin Plate.
Garry Iron & Steel Co., Cleveland, O.
N. & G. Taylor Co., Chestnut and Third Sts., Philadelphia, Pa.

Toilet Paper Cabinet.
A. P. W. Paper Co., Albany, N. Y.

Trees, Shrubs, Etc.
Bobbink & Atkins, Rutherford, N. J.

Vacuum Cleaners.
Cleveland Vacuum Machy Co., 1107 Prospect Ave., Cleveland, O.
Vacuum Engineering Co., 114 Liberty St., N.Y.C.

Valves.
Jenkins Bros., New York, Boston, Philadelphia, Chicago and London.

Varnish.
Glidden Varnish Co., Cleveland, O.
Lowe Bros. Co., Dayton, Ohio.
Standard Varnish Works, New York, Chicago, Toronto, London, Berlin, Brussels.
Thomson Wood Finishing Co., Philadelphia.

Vault Lights.
American Luxfer Prism Co., Chicago; 507-509 West Broadway, New York City.
Grauer & Co., Pittsburgh, Pa.

Ventilating Fans.
Howard & Morse, 45 Fulton St., N. Y.

Ventilators.
Burt Mfg. Co., Akron, Ohio.
Ideal Mfg. Co., Erie, Pa.
Royal Ventilator Co., 417 Locust St., Phila., Pa.

Wall and Ceiling Finishes.
M. Ewing Fox & Co., 136th St. and Rider Ave., N. Y. C.; 53-55 E. Lake St., Chicago.

Wall Boxes Electrical.
Hart Mfg. Co., Hartford, Conn.

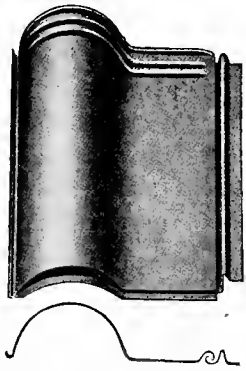
Wall Hangings.
Fr. Beck & Co., 7th Ave. and 29th St., N. Y. C.

Wall Reels.
Wirt & Knox Mfg. Co., North 4th St., Phila, Pa.

Water Heaters.
Humphrey Co., 538 Rose St., Kalamazoo, Mich.
Kelsey Heating Co., Syracuse, N. Y.
Thatcher Furnace Co., 110 Beekman St., N.Y.C.
S. Wilks Mfg. Co., 3535 Shields Ave., Chicago.
John Wood Mfg. Co., Conshohocken, Pa.

The Edwards Metal Spanish Tile

These tiles are the *right* red. They are light, practically imperishable, distinctly correct in design. Wind-, weather-, storm-, fire- and lightning-proof. Can be applied without soldering or the use of special tools by any competent workman. In fact, they have every good point of the heavy terra-cotta Spanish roofing tile with none of its disadvantages. Let us send you some literature on the subject.



THE EDWARDS MFG. CO.

610-630 Eggleston Avenue, Cincinnati, Ohio.

"Out of the Ordinary"

ROOF SLATES

BLACK — GREEN — PURPLE — RED

Our productions are a development from the ordinary or standard grades of Roof Slates to the strong, heavy effects demanded by the architecture of the present day.

THICKNESSES, full 3-16 in., ¼ in., ⅜ in., ½ in., ¾ in., 1 in., 1¼ in., 1½ in., all with drilled and countersunk nail holes and rough dressed edges.

COLORS — Grand Central Black, Unfading Green, Royal Purple, Unfading Mottled Purple and Green and Unfading Red.

Specify The E. J. Johnson Co. Production for Successful Results

SLATE BLACKBOARDS

The hardest and strongest rock with a perfect hand shaved surface. A Blackboard not made to meet cheap competition but to furnish a perfect and lasting writing surface. Our Blackboard Pamphlet tells all about them, and also how to properly erect on the wall.

THE E. J. JOHNSON CO.

Slate Producers

MAIN OFFICE
38 Park Row, New York

BRANCH OFFICE
626 Park Bldg., Pittsburg, Pa.

SAGAX

FIREPROOF WEATHERPROOF

Wood Substitute

Fire Doors and Fire Shutters

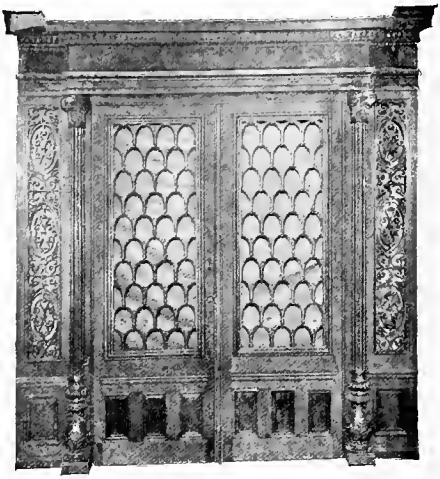
Approved by National Board of Fire Underwriters. Perfectly smooth. Nothing to rust. Can be finished in imitation of finest wood.

Send for catalogue, or see pages 708-9, in "Sweet's."

The Sagax Wood Co.

Foot Andre St., Baltimore, Md.

J. W. RAPP, N. Y. Distributor



ONE OF SIX PAIRS BRONZE DOORS
Hall of Records, New York

MANHATTAN BRASS CO.

ARCHITECTURAL BRONZE AND BRASS

27th to 28th St. & 1st Ave. New York

DONATO CUOZZO

General Contractor

Specialties Reinforced Concrete, Water Work, Landscape Work, etc. 25 years on field of construction.

Park Row Building, New York City

Telephone Connection Estimates Furnished

Waterproof Compound.
Sandusky Portland Cement Co., Sandusky, O
The Waterproofing Co., New York, Boston, Pittsburg.
Water Supply.
Kewanee Water Supply Co., Kewanee, Ill.
Weather-strips, Metal.
Chamberlin Metal Weather-Strip Co., Detroit.
White Lead.
Carter White Lead Co., Chicago, Ill.
National Lead Co., 111 Broadway, N. Y. C.
Window Corner Posts.
Detroit Show Case Co., 477 West Fort St., Detroit, Mich.
Window Frames.
Detroit Steel Products Co., Detroit, Mich.
Window Sash.
Detroit Steel Products Co., Detroit, Mich.
Windows (Prism).
American Luxfer Prism Co., 507-509 West Broadway, N. Y. C.; Chicago, Ill.
Wiring (Electric).
Western Electric Co., New York.
Wire Work.
Estey Wire Works Co., 59 Fulton St., N. Y. C.
Wood Filler.
Bridgeport Wood Finishing Co., New Milford, Conn.
Wood Preservative.
Samuel Cabot, 141 Milk St. Boston, Mass.

Unsightly Coal Windows

Are always **EYESORES.**
Strictly Burglarproof.
No Broken Glass.
No Soiled Siding.
No Marred Foundation where the Majestic Chute is used.
It can be placed in an old wall as well as in new.

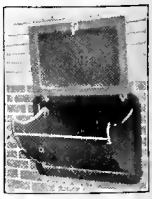
COAL WOOD

MAJESTIC CHUTE

VEGETABLE

COST LOW

The cost is so small that no modern residence should be without one. Made in three sizes:



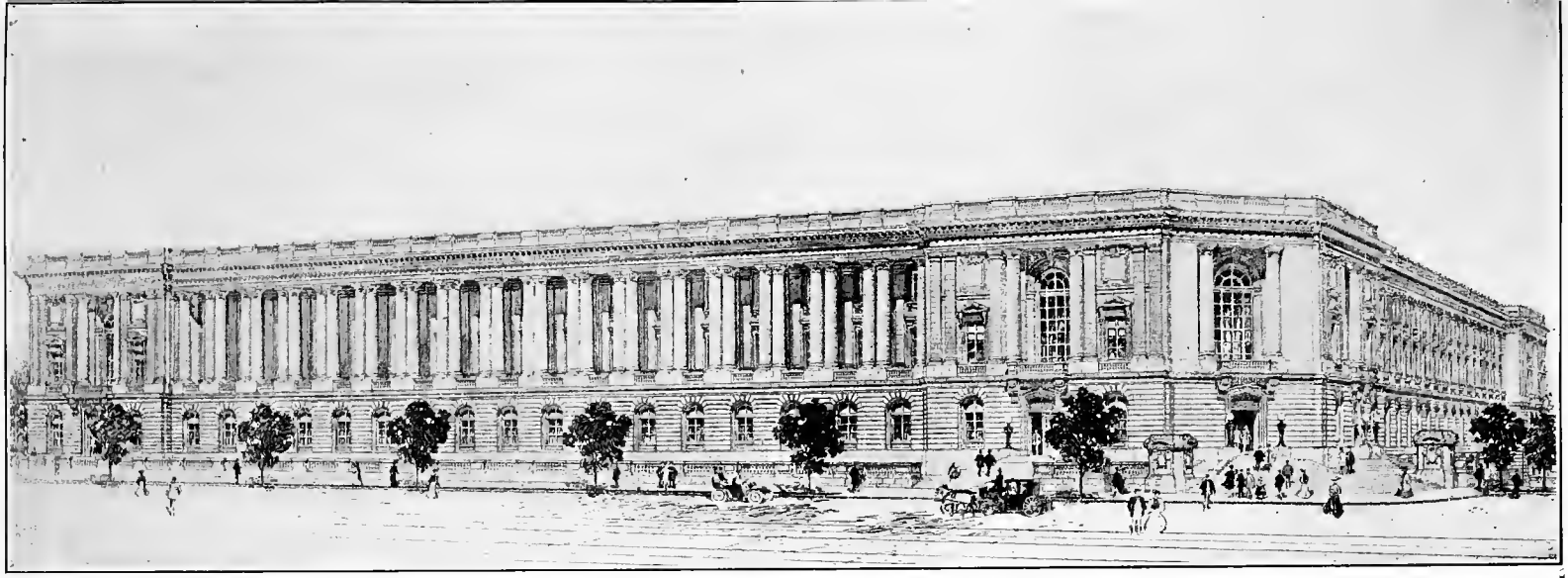
No. 1 ..... 16 x 22
No. 2 ..... 16 x 27
No. 3 ..... 22 x 33

Write today for descriptive circular

Majestic Furnace & Foundry Co.

Dept. G

HUNTINGTON, INDIANA



Built of
South Dover Marble

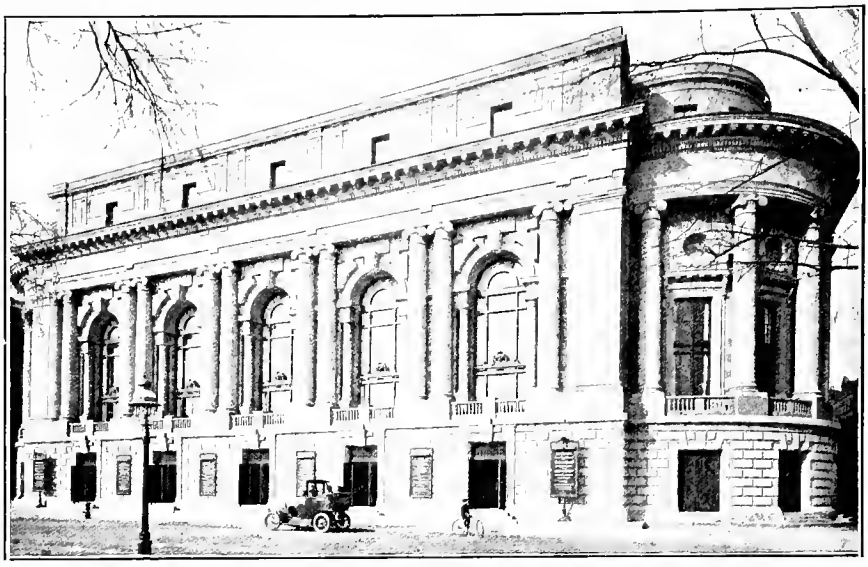
HOUSE OFFICE BUILDING
Washington, D. C.

Carrere & Hastings
Consulting Architects

B. A. & G. N. WILLIAMS

Cut Stone Contractors

Avenue A and 68th Street :: :: :: :: :: NEW YORK CITY



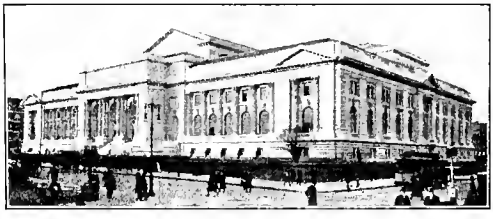
THE NEW THEATRE, NEW YORK CITY. Carrere & Hastings, Architects

Roberts Improved System of Filtration

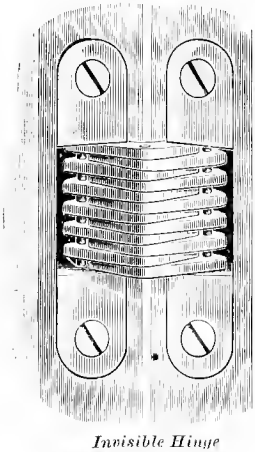
Insures pure, clear, sparkling water, for all uses, regardless of condition of source of water supply. The standard of excellence. Thoroughly endorsed by its many users. List of references, specifications and estimates promptly furnished.

ROBERTS FILTER MFG. COMPANY, Inc.

New York Office, Flatiron Building PHILADELPHIA, PA.



The Most Important Work of Carrere & Hastings
THE NEW YORK PUBLIC LIBRARY



Invisible Hinge as it appears when door is open

is equipped with several hundreds of

SOSS Invisible Hinges

thus giving to the doors the artistic effect obtained by perfectly smooth joints and the absence of projecting butts.

Send for booklet or see Sweet's pages 598, 599

Soss Manufacturing Comp'y

247 Broadway New York

The Architect Who Reads

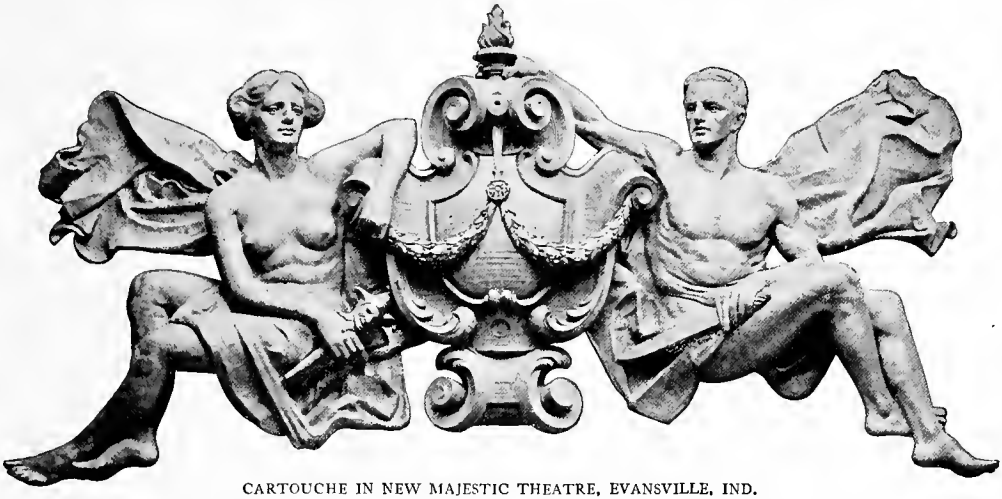
the Architectural Record every once in awhile gains much--but the one who subscribes regularly keeps abreast of the times in his profession and has a record of architectural progress for his reference library. May we add your name to our lists? Yearly subscription rates, $3.00, postage prepaid.

The Architectural Record Co.

11 East 24th Street

NEW YORK

Decorative **FISCHER & JIROUCH** Sculptors



CARTOUCHE IN NEW MAJESTIC THEATRE, EVANSVILLE, IND.
J. L. WILLS, Architect.

We make a specialty of Architects' Requirements and Designs in all kinds of Plastic Ornamentation.
We accord personal attention to our contracts and employ only most skilled workmen.
Work now in progress: Masonic Temple, Youngstown, Ohio; Theatre at Evansville, Ind.; Theatre at Elyria, Ohio; Atkins Hotel, Knoxville, Tenn.

WE SOLICIT CORRESPONDENCE

FISCHER & JIROUCH, 1008 Scovil Avenue, S. E., Cleveland, Ohio

Metal Back Medicine Cabinets

The Cabinets are made with a heavy Steel Back, Porcelain Enamelled. The Door and Frame are made in either Brass, Nickel Plated or White Metal (German Silver). Each Cabinet is supplied with our own Special Shelf Supports, which slide on a slotted upright; the Shelf Supports, being equipped with Set Screws, permit the Shelves to be set at any desired height.

We would advise the use of the White Metal for the Frame and Door, also for the Slides and Shelf Supports. This metal retains its White Silver appearance at all times, is easily cleaned and will not wear off like Nickel, or tarnish as Brass or Bronze do.

Completed Cabinets can be seen at our warerooms or at the Exhibition Rooms of the Building Trades Employers Association, No. 30 West 33d St., New York City.

Catalog of Medicine Cabinets on application, or see pages 1382-3, "Sweet's"—1910 edition.

FRANK H. GRAF MFG. CO., 325 7th Av., cor. 28th St., New York
Telephone, 320 Chelsea

Construction Tabloid Catalogs

will appear weekly in the Manhattan Edition of the Record & Guide starting in January

This department provides for the publication and classification of essential trade information which the buyer must have in order quickly and intelligently to specify and order goods.

The standard method of arrangement used marks a great advance in logical publicity and economical sales promotion.

If you desire to sell goods or services, with the least expense, in the building market of Greater New York, you should publish your condensed catalog in the "Tabloid" department of the Record and Guide.

Send for Sample Sheets and Full Information

THE RECORD & GUIDE CO.

11 East Twenty-fourth St., New York

841 Monadnock Bldg., Chicago
Bessemer Bldg., Pittsburgh
603 Chestnut St., Philadelphia

Pipe Organs

No. 180

The time is at hand when an inferior organ will not be tolerated by any person who is acquainted with the great advance that has been made in the art of organ building.

This Company has been foremost in perfecting tubular and electropneumatic actions, and in inventing many new stops, thereby giving the public a product which is beyond anything ever dreamed of a few years ago.

Our book "L," giving a full explanation of the Austin organ, gladly mailed upon request.

Austin Organ Company

Hartford, Connecticut

CARRIE MEMORIAL CLOCK TOWER, Providence, R. I.

The E. Howard Clock Co.

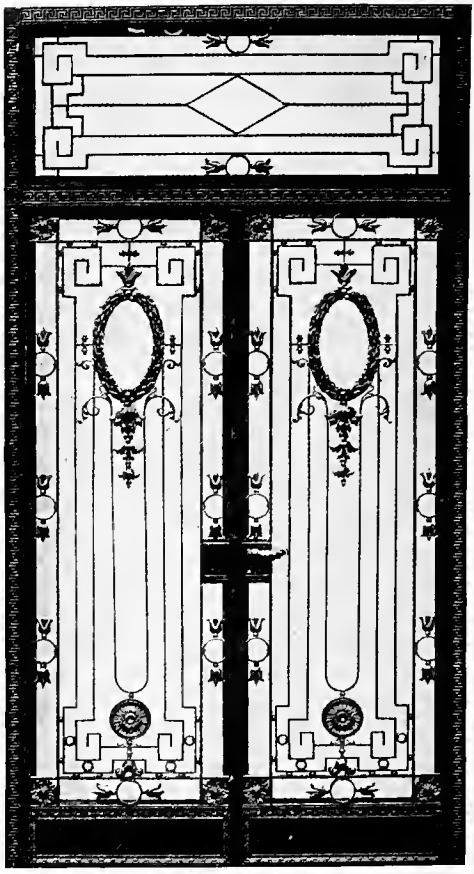
Boston New York Chicago

Make a specialty of Tower and Stable Clocks for country estates and can offer a long list of the highest references, from which the few following representative names are selected:

G. F. Baker
E. C. Converse
T. M. Davis
I. Guggenheim
T. W. Lawson
C. H. Mackay
D. G. Reid
A. G. Vanderbilt
G. W. Vanderbilt
Payne Whitney
Howard Gould
J. R. McLean
E. F. Searles
W. K. Vanderbilt
L. D. Ward
De Lancey Kane
E. B. Dane
F. L. Ames
Arthur Letts
Jencks Park, Pawtucket

Lasar-Letzig Mfg. Co.

ST. LOUIS, U. S. A.



ORNAMENTAL WROT IRON AND GLASS FRONT ENTRANCE DOORS

MANUFACTURE TO ORDER

Plain & Ornamental Work in Iron, Steel Brass and Bronze

ELEVATOR ENCLOSURES AND CABS
GATES, GRILLES
RAILINGS, DOORS, METAL LOCKERS
BANK AND COUNTER SCREENS

STANDARD for the NEW YORK PUBLIC LIBRARY

CARRERE & HASTINGS, Architects

GRC

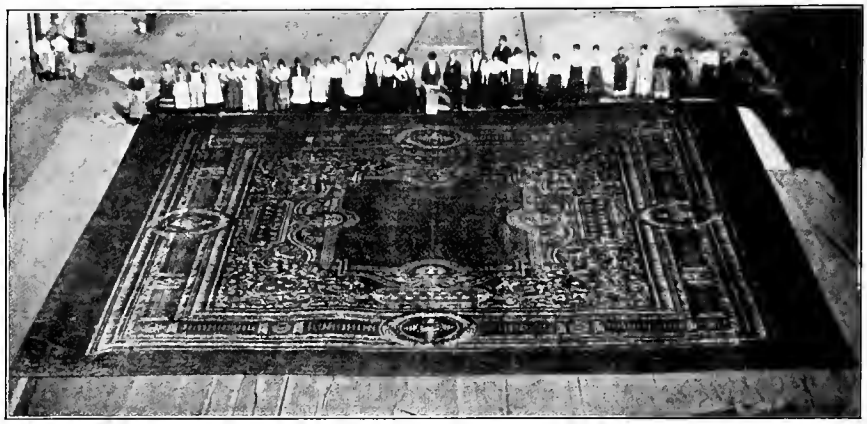
THE GORHAM CO ARCHITECTURAL BRONZE

FIFTH AVENUE NEW YORK

Works at Providence, R. I.

Rugs of Distinction

Grand Prix, Paris, 1900 — Grand Prix, St. Louis, 1904



THE illustration above shows the largest **one piece** hand tufted rug imported. Made in Austria by Bollentin & Thompson for Pottier & Stymus, for the Masonic Temple, New York City. Size, 53 x 60 feet. Contains 7,344,000 knots. Delivered in less than eight weeks from day order was placed.

The choice of the proper floor covering probably has as much to do with the success of a decorative plan as any other single item.

A Rug which harmonizes **absolutely** with the scheme of decoration gives the last touch of distinction to a room—the touch that culture demands.

Our fabrics are the richest and most satisfactory offered today for the discriminating architect and his client. Every piece is made to order, in any size, design or color, in the largest and best mill in the world, thus assuring absolute satisfaction.

The prominent, up to date decorators and dealers in all parts of the country are our exclusive distributers, and will be pleased to show our samples of the various qualities.

You cannot afford to be without the information concerning our goods, as they are the best. We will gladly furnish the name of decorator or dealer nearest you on application, and through whom all orders may be placed.

Here is a list of a few of the prominent buildings in which our fabrics have been used:

Chas. M. Schwab Mansion, N. Y. City
W. H. Crocker, Burlingame, Cal.
Clarence Mackay, Harbor Hill, Long Island
John D. Rockefeller, New York City
Paul Rainey, New York City
B. F. Yoakum, New York City
F. W. Clifford, Minneapolis
Executive Office, White House, Wash., D. C.
Waldorf-Astoria, N. Y. City
Frankfort Capitol, Frankfort, Ky.
Masonic Temple, New York City
La Salle Hotel, Chicago, Ill.
Plaza Hotel, New York City
National Park Bank, New York City
Sinton Hotel, Cincinnati

BOLLENTIN & THOMPSON

34 Union Square East — New York City, N. Y.

THERE was recently held at the Metropolitan Museum of Art, in New York, a most interesting and instructive exhibition of furniture and house furnishings of the eighteenth and nineteenth centuries. The most interesting portion of that exhibition was the section devoted to American Colonial furniture of the nineteenth century, by a designer and cabinetmaker, Duncan Phyfe (1768-1854), of New York City.

Not only for architects, but for the public, which attended in large numbers, this was one of the most important events of its kind ever attempted in New York.

Why? For two reasons:

First—The exhibition contained a greater number of pieces of Colonial furniture and furnishings of real artistic and practical value than have ever been seen by the present generation in any one place.

Second—The exhibition exerted a beneficial influence on the large number of people who went to see it They could not have left without appreciating the desirability of possessing in their homes furniture and furnishings into the design of which so much thought was put, and on which such honest material and competent labor were employed.

This is the sort of decorative furnishings, floor and wall coverings and furniture we like to build and sell, and these are our mottoes:

Thoughtful Design, Honest Material and Competent Labor

The architects and designers of today are as competent to produce designs of merit for present needs as were those of Duncan Phyfe's time for the requirements of a century ago.

We can guarantee the Honest Material and the Competent Labor.

Lord & Taylor

New York

Broadway and 20th St.;
Fifth Ave.; 19th St.

Established 1826

Paris, 6 Cité Parades
Manchester, 9 Mosley St.
Chemnitz, Germany
St. Gallen, Switzerland

New York City Residence
Charles A. Platt, Architect

The Kelsey Fresh Air System of Heating

Leading architects are specifying the Kelsey system—

Because clients are guaranteed a warm house all over.

Because clumsy, unsightly radiators are not required.

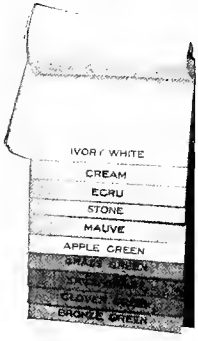
Because no residence, church or school is thoroughly up to date unless fresh air is constantly introduced.

There are several hundred equally strong reasons why you should specify the Kelsey Warm Air Generator. **35,000 in use. Send for booklet.**

Kelsey Heating Company

Salina Street
Syracuse, N. Y.

156-158 Fifth Ave.
New York City



Get this sample book

See Brenlin, the shade material that is different, wears so much better

It is made in several tones of all colors—one to harmonize with any color scheme or decoration and in Brenlin Duplex, light one side, dark the other. The soft, dull finish adds to the restfulness of your rooms.

It won't fade. Water won't spot it.

Write today for sample book and name of Brenlin dealer in your city. If no dealer in your town has secured Brenlin, we shall see that you are supplied.

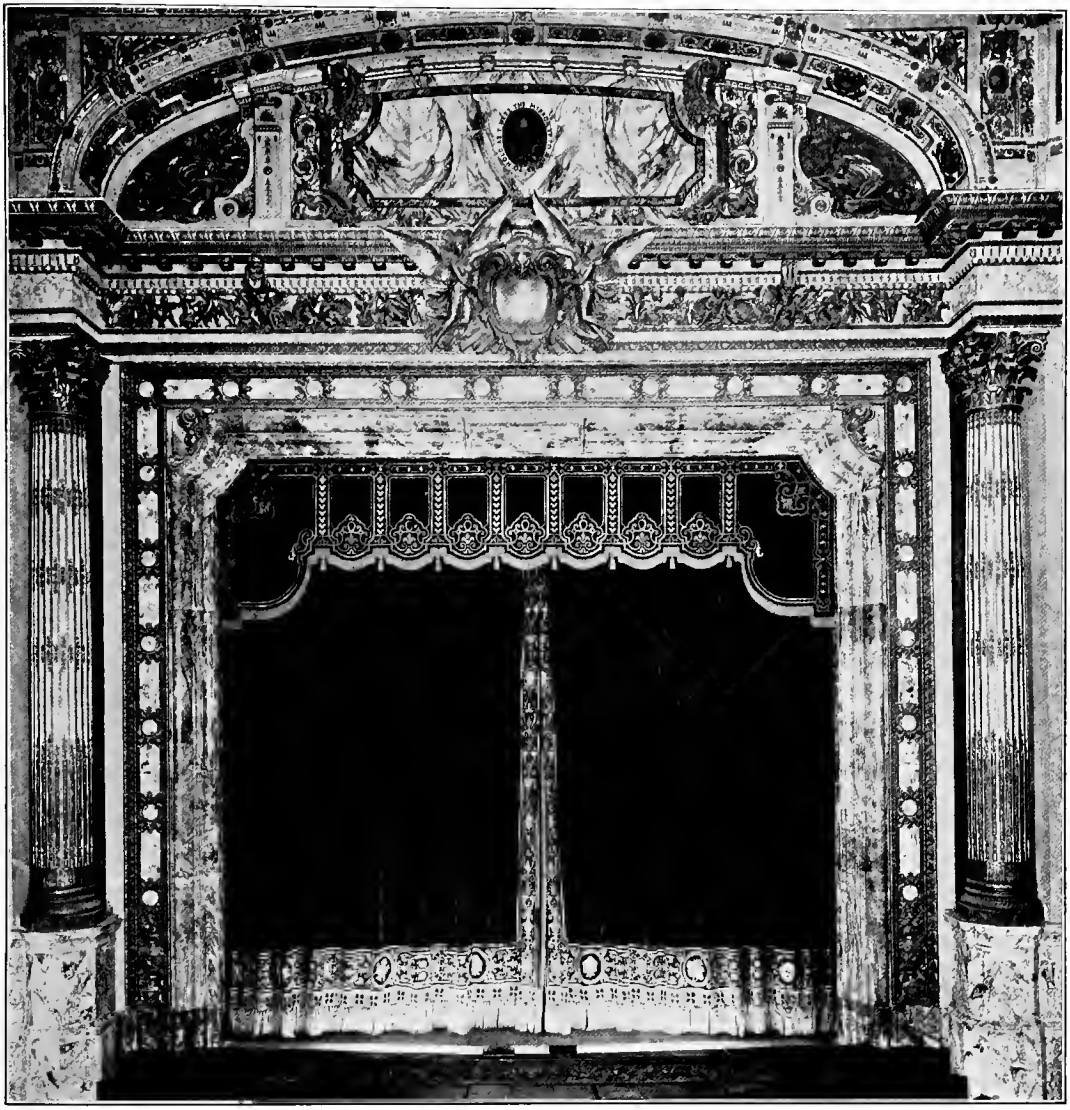
CHAS. W BRENEMAN & Co., 2069-2079 Reading Road, Cincinnati

All Brenlin has the name perforated in the margin of every yard. Other shades look like Brenlin when they are new; therefore look for the marking BRENLIN

Brenlin

Trade Mark Registered, United States Patent Office

A Brenlin shade 7 feet long 38 inches wide, complete with best roller, costs $1.00



Carrere & Hastings, Architects

New Theatre Stage Curtains

Also Box Curtains

MADE BY

A. H. Davenport Company

Boston House
96 and 98 Washington St.

New York
150 Madison Avenue

THE ROYAL VENTILATORS

provide an ever-changing supply of fresh air without cost of operating. Correct principles and careful workmanship have won many specifications for us. Shall we have yours? The "ROYAL" is neater in appearance, will last longer and is advantageously different from all others.

Nine-tenths of all the plans drawn by architects and engineers today do not provide for ANY VENTILATION—and yet we are in receipt of hundreds of letters from owners and even prominent architects saying they did not KNOW the "ROYAL" was so cheap—as contractors tried to change the list price from which there is always a discount of 50 to 85 per cent.

Always write the "ROYAL" for prices if you are in doubt as to the cost—and what you should use.

Ventilator with Base and Damper for Apex or Roof

WHY

Are single cone ventilators inferior to the Standard Double Cone Royal?

Because it costs less to make them.

WHY?

Because they weigh less.

WHY?

Because there is less material in them.

WHY?

Because they are made to sell cheap and have the smallest possible amount of time and material used in them.

Why are they not as good?

For many reasons:

1. Because they will not last as long.
2. Because they will not exhaust as much air.
3. Because they being flimsy do not possess one-half the stability of the Royal.
4. Because they are cheap looking compared with the Royal.
5. Because no honest test has ever equalled the test of the Royal.

When foundries like

Tobatta Iron Works, Y. Ilkawa, Japan.
Reading Iron Works, Reading, Pa.
Trenton Brass and Machinery Co., Trenton, N. J.
American Car and Foundry Co., St. Louis.
Frick Company, Waynesboro, Pa.
Chandler & Price Co., Palmyra, N. Y.
American Pulley Company, Philadelphia, Pa.

and hundreds like them send us their orders for Royal Ventilators, it is time for you to stop and consider and write us for our new booklet and other information.

We never tire of explaining the little details of construction—our Double Cones, Double Wire Deflectors, Double Standing Ribs, etc., but they are important and you will find them only in the "Royal." Won't you write us for our booklet and prices?

We make "Royal" Ventilators so efficient that they will properly ventilate a building and prevent tuberculosis. Wholesale prices f. o. b. factory.

Partial List of the Hundreds of School Buildings

Girard College, Philadelphia, Pa. (3 42-in. glass top).
Public School, Nazareth, Pa. (1 54-in.).
Second and Lebanon Streets School, Philadelphia, Pa. (4 36-in.)
Henry Horn School, Philadelphia, Pa., (5 42-in.)
College of Physicians, Philadelphia, Pa. (9 36-in., 42-in., 48-in. copper).
St. Vincent's Seminary, Germantown, Philadelphia, Pa. (5 42-in.)
High School, West Seneca, N. Y. (1 16-in., 2 28-in.).
Ridge Street School, West Seneca, N. Y. (1 30-in.).
Public School, West Seneca, N. Y. 1 28-in.).
Public School Building, Griersville, N. Y. (1 34-in.)
Public School Building, Middleville, N. Y. (1 24-in.)
Public School Building, Huntington, N. Y. (1 40-in.)
Public School Building, Whitesville, N. Y. (1 40-in.)
Public School Building, Fairport, N. Y., (1 42-in.)
Norwood School, Lynbrook, N. Y. (1 44-in.)
School Building, Sayesville, N. Y. 1 51-in.)
School Bldg., Scarsdale, N.Y. (1 72-in.)
School Bldg., Patchogue, N.Y. (1 48-in.)
School Bldg., Dispatch, N. Y. (1 32-in.)
School Building, Poughkeepsie, N. Y. (1 42-in., 1 52-in., 1 48-in.)
Rahway Reformatory, Rahway, N. J. 5 36-in.).
Public School Building, Andover, N. Y. (1 24-in.).
Public School Bldg., Yonkers, N. Y.
William St. Public School, Lockport, N. Y. (1 36-in.).
East Rome School, Rome, N. Y. (1 14-in.).
James St. School, Rome, N. Y. (1 14-in.).
Liberty St. School, Rome, N. Y. (1 14-in.).
Public School Building, Spring Valley, N. Y. (1 44-in., 2 30-in.).
High School, Saratoga Springs, N. Y. (2 44-in.).
Owego School, Owego, N. Y. (1 90-in.)
High School, Northport, N. Y. (1 28-in.)
Oaksville School, Peekskill, N. Y. (1 72-in., 2 24-in.).
Southside Grammar School, Jamestown, N. Y. (2 16-in.).
Public School, East Hampton, N. Y.
Pub. School, Little Falls, N.Y. (2 24-in.)
High School, Wellesville, N. Y. (1 32-in.).
St. Mary's Parochial School, Rome, N.Y.
New Public School, Palmyra, N. Y. (1 44-in.).
Public School Bldgs., N. Y. City, N. Y.
Public School, Odessa, N. Y. (1 30-in.)
New High School, Mamaroneck, N. Y.
Holy Name Parochial School, Philadelphia, Pa., (5 42-in.).
Immaculate Conception School, Germantown, Philadelphia, Pa. (1 18-in., 1 24-in., 3 60-in.).

ROYAL VENTILA

Main Office and Factory, 417

THE ROYAL WAY

These are the Points that Count

Double Cones.

Least resistance to natural and forced draft.

Scientific Construction Deflectors

The "Know How" to do it right

Always Ventilating.

Pointed Bottom Cones.

Pointed Radiating Ribs.

Superiority Over All Others.

Satisfied Customers

Prompt Shipments.

We Never Tire of Explaining
We devote all our energy to making a complete line of
High Grade Royal Ventilators
made in every size and shape to suit every condition; Round, Square, Rectangular, Glass and Metal Top; of Galvanized Steel, Charcoal Iron, and Cold Rolled Copper.

GUARANTEE

The "Royal" Patented July, 1904
Manufactured by
Royal Ventilator & Manufacturing Co.
Philadelphia, Pa.
JOSEPH C. HENVIS, Patentee

We guarantee that every ventilator bearing this patent plate, as herein shown, is made in exact accordance with the following specifications:

The Royal Ventilators are full size.

The Royal Ventilators are the most efficient made.

The Royal Ventilators have the largest area of exhaust.

The Royal Ventilators are uniform and regular (as we do not employ boys or helpers, only first-class mechanics).

These are the qualities for which you pay.

Many other Philadelphia school buildings would use the Royal but for the fact the Board of Education allows the contractor to use the cheapest ventilator that can be purchased. We ship all over the world. Write us for 1910 Booklet and Price List.

Ventilated with the "ROYAL" Ventilators

University of Pennsylvania, Phila., Pa.
School Bldg., Montrose, Pa. (2 27-in.)
Logan School, Phila., Pa. (2 54-in.)
Forrest School, Phila., Pa. (2 36-in.)
Whitehall School, Philadelphia, Pa. (2 50-in. and 2 40-in.)
School Building, Crydersville, N. Y. 2 36-in.)
School Bldg., Brocton, N.Y. (1 46-in.)
School Building, Newark, N. J. (2 16-in., 1 54-in.).
Public School Bldg., Passaic, N. J.
Public School Building, Montclair, N. J. (2 60-in.).
School Building, Orange, N. J. (1 61-in. x 56-in.).
School Bldg., S. Orange, N. J. (3 54-in.)
13th Avenue School, Newark, N. J. (5 54-in., 1 30-in.).
Public School, Butler, N. J. (2 60-in.).
High School, Dover, N. J. (1 72-in. copper).
School Building, St. Paul, Minn. (2 96-in., 1 84-in., 2 30-in.).
Hawthorne St. School, Newark, N. J. (2 18-in. 1 48-in., 2 54-in., 1 60-in.)
Warren St. School, Newark, N. J. (1 18-in., 3 42-in., 2 32-in., 1 48-in.).
High School, Montclair, N. J. (4 52-in. x 16-in., rectangular).
St. Mary's School, Garden City, N. J. (1 60-in. x 60-in.).
Eastern School, East Orange, N. J. (2 54-in. x 80-in., 1 24-in.).
Nassau School, East Orange, N. J. (2 26-in. x 48-in.).
Washington School, West Orange, N. J. (60-in. x 60-in.).
Columbia School, South Orange, N. J. (2 48-in. and 1 36-in.).
West Side School, Atlantic City, N. J. (2 48-in.).
Indiana avenue School, Atlantic City, N. J. (2 54-in.).
New Jersey Avenue School, Atlantic City, N. J. (2 54-in., 2 48-in.).
No. 1 School, Long Branch, N. J. (1 48-in.).
No. 3 School, Long Branch, N. J. (1 48-in.).
Public School Building, Algar, Ohio, (2 36-in.).
School Bldg., Freemont, Ohio, (2 30-in.)
School Bldg., Bradford, Ohio, (2 32-in.)
School Bldg., Greenville, Ohio, (2 32-in.)
School Bldg., Sandusky, Ohio, (4 42-in.)
Stamford School, Stamford, Conn. (2 36-in. x 72-in. rectangular).
School Building, Ford City, Pa. (2 22-in., 2 60-in., 2 62-in.)
Wm. Penn High School for Girls, Phila, Pa. (1 78-in., 3 72-in., 3 66-in., 1 50-in., 5 48-in., 2 30-in., 4 24-in. copper).
J. S. Hart Public School, Phila., Pa. (1 48-in., 1 54-in., 1 60-in., 1 72-in.).
Belview School, Philadelphia, Pa., (1 48-in., 1 38-in., 3 40-in., 1 30-in.).
Union Free School Dist. No. 4, Smithville, L. I. (2 40-in. and 1 54-in.)
Thomas Baptist Orphanage, Thomasville, N. C. (1 30-in.).

AND HUNDREDS OF OTHERS.

TOR COMPANY

Locust St., Philadelphia, Pa.

WHY NOT?

Take advantage of modern methods and obtain reliable and prompt information regarding all building operations by using

DODGE REPORTS

If you could know in advance whenever a contract in your line is to be let, you would take advantage of the opportunity.

WE DO NOT GUESS

We can furnish you with daily accurate information in regard to all Building and Engineering enterprises contemplated or in course of construction which may require the use of products or services of all parties engaged in construction, equipment, decorating and furnishing.
Our system enables us to select only such matter as will interest YOU.

THE F. W. DODGE COMPANY

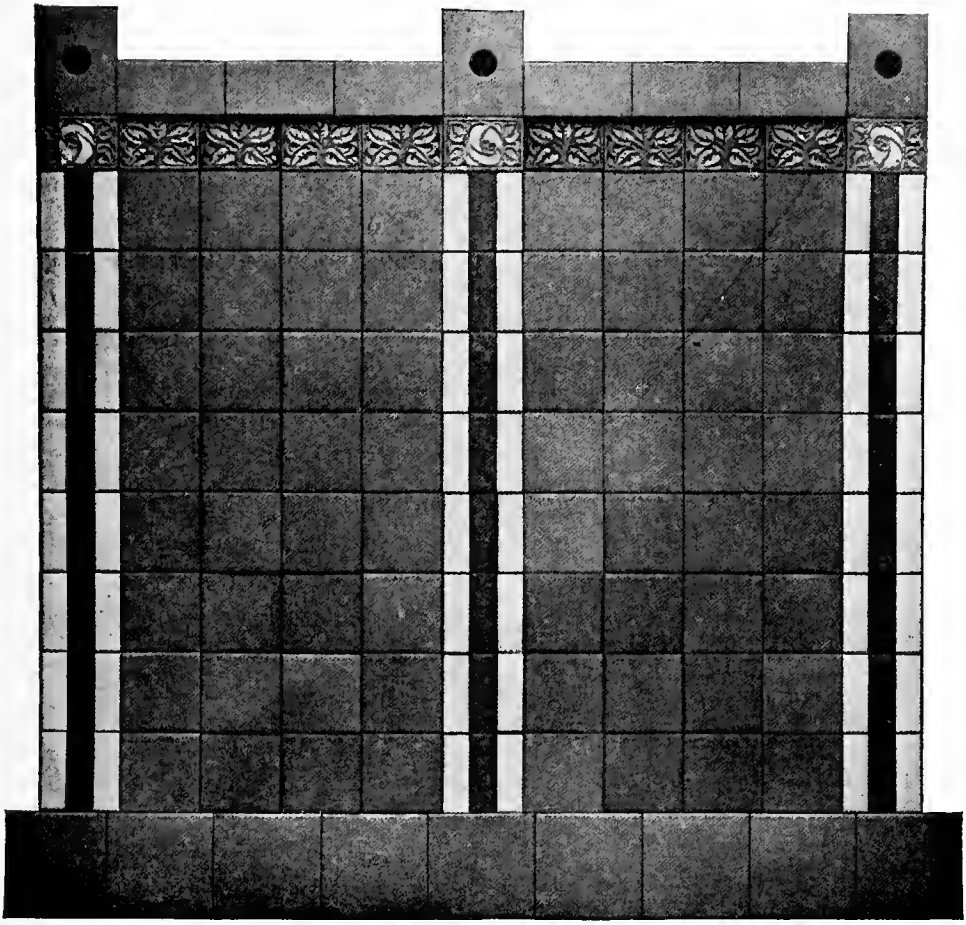
11 East Twenty-fourth Street, New York

BOSTON
114 Federal Street

PHILADELPHIA
603 Chestnut Street

PITTSBURGH
Westinghouse Building

CHICAGO
Monadnock Building



Section of Wainscot in Plain and Decorative Rookwood Faience Tiles. The soft matt textures of the Rookwood Glazes offer effects entirely unlike the cold hardness of usual tile finish and are not excelled in decorative richness by the finest colored marbles. : : : :

The Rookwood Pottery Company

CINCINNATI

Eastern Office, No. 1 Madison Ave., New York

JUST ONE

CARNEGIE INSTITUTE OF WASHINGTON, WASHINGTON, D. C.

Architects
Carrere & Hastings
New York

Cut Stone Contractors
E. F. Giberson & Co.
Bedford, Ind.

Of the buildings in which Carrere & Hastings have used "Old Hoosier Blue" Bedford Stone we are illustrating the Carnegie Institute of Washington, D. C.

EXAMPLE

As an example of the rare dignity that is secured in executing perfect classic design in this aristocrat among building materials perhaps no happier selection could be made.

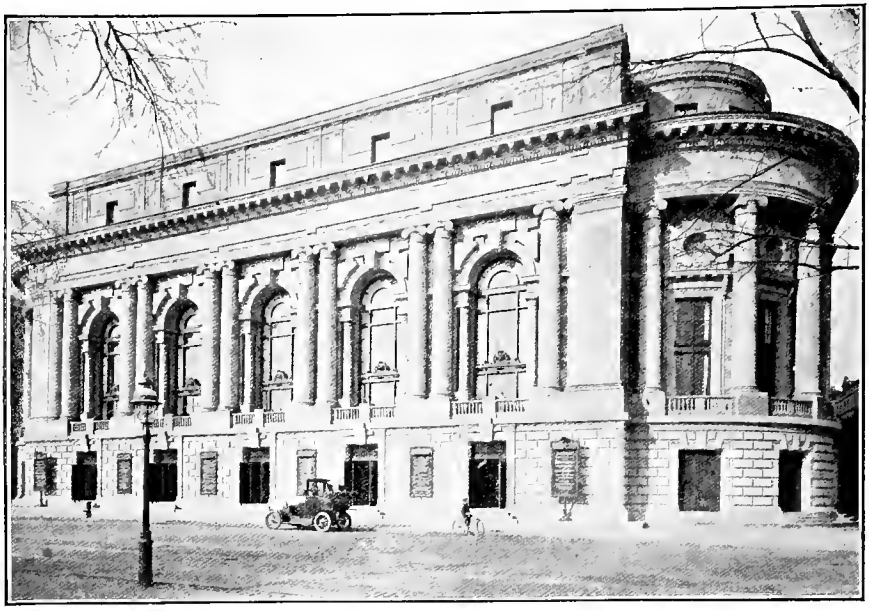
The deep blue quarry color of "Old Hoosier Blue" weathers to the light steel grey of the wonderful "Old Hoosier" texture, and architects who have a public building of classic design will be repaid to see the effect attained in this Washington building.

Write the nearest office for samples and standard, non-fluctuating price of this even colored, close grained, sound, weatherproof stone from the "Old Hoosier" Quarry.

THE BEDFORD QUARRIES COMPANY

204 Dearborn St. 818 Euclid Ave. No. 1 Madison Ave.

CHICAGO **CLEVELAND** **NEW YORK**



THE NEW THEATRE, NEW YORK CITY
Carrere & Hastings, Architects

The Roebling System of Fire-Proofing is the Recognized Standard

---

The Roebling Construction Co.

Main Office: FULLER BLDG., TWENTY-THIRD STREET and BROADWAY, NEW YORK. Works: TRENTON, NEW JERSEY

BRANCHES:

BOSTON PHILADELPHIA BUFFALO CHICAGO SAN FRANCISCO

Vol. XXVII. No. 1 JANUARY, 1910 Whole No. 136

THE ARCHITECTURAL RECORD

CONTENTS

THE WORK
of
MESSRS. CARRÈRE & HASTINGS
ILLUSTRATED

NOTES AND COMMENTS (Illustrated) 121

Public Appreciation—Commercial Architecture and Utilitarian Clients—What City Builds—Mural Paintings in the West—Boston's New Museum of Fine Arts—Pittsburgh Has an Ideal—St. John's Chapel, New York—The Boston Exposition—Plea for Harmonious Building—Les Architectes des Cathedrales Gothiques—Southern Pennsylvania Chapter American Institute of Architects.

PUBLISHED BY
THE ARCHITECTURAL RECORD COMPANY

President, CLINTON W. SWEET
Vice-Pres. & Genl. Mgr., H. W. DESMOND
Treasurer, F. W. DODGE
Secretary, F. T. MILLER

11-15 East Twenty-fourth Street, Manhattan
Telephone, 4430 Madison Square

Subscription (Yearly) $3.00 Published Monthly

Copyright, 1909, by "THE ARCHITECTURAL RECORD COMPANY." All rights reserved.
Entered May 22, 1902, as second-class matter, Post Office at New York, N.Y., Act of Congress of March 3d, 1879

TRADERS' BANK (1905).

Toronto, Canada.

THE ARCHITECTURAL RECORD

VOL. XXVII JANUARY, 1910 No. 1

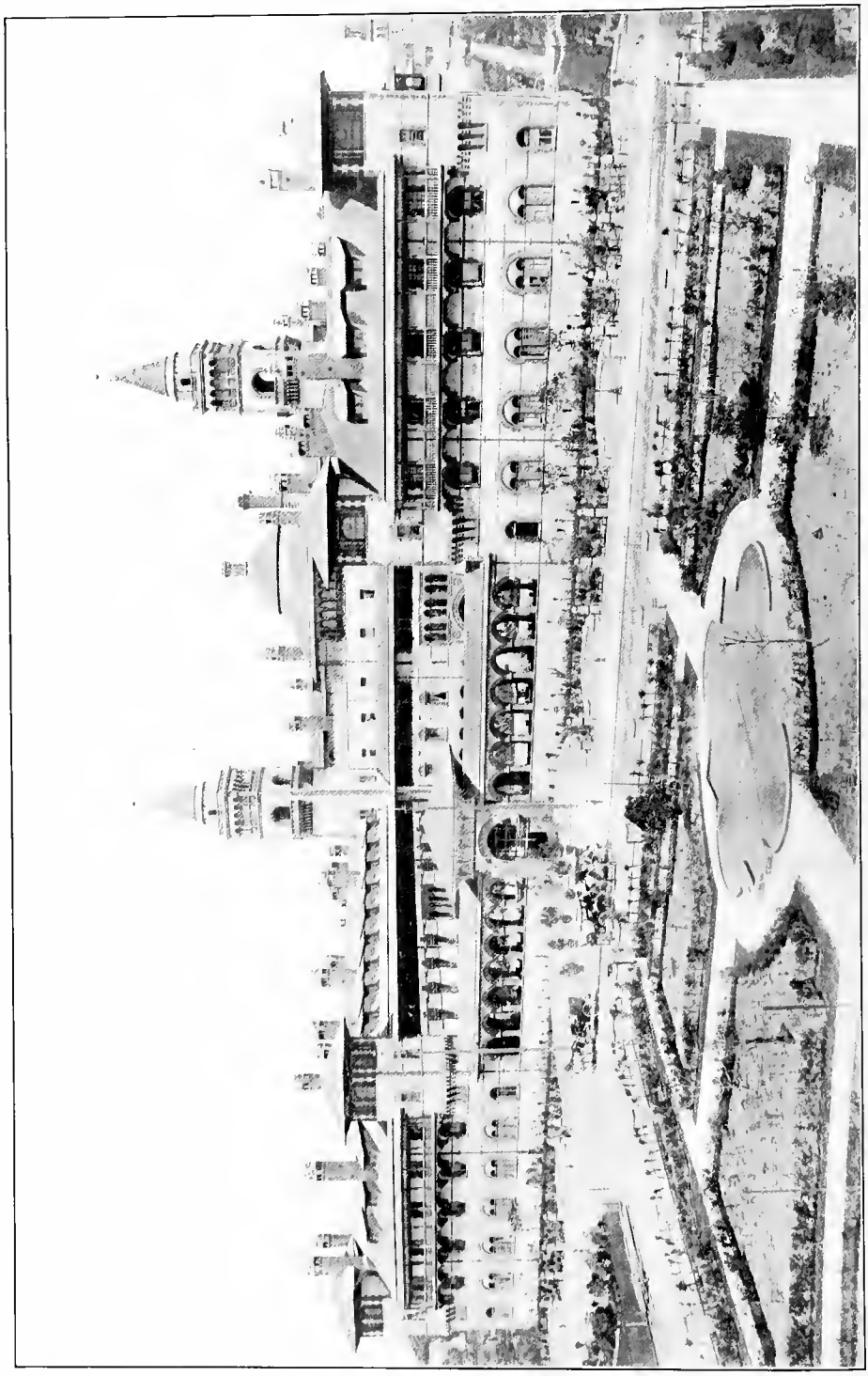
The Work of Messrs. Carrère & Hastings

During the last thirty years the architectural revival in the Eastern American states has been dominated by the influence and the work of two firms —McKim, Mead & White, and Carrère & Hastings. There have, of course, been practicing a score or more of other architects, who have made valuable individual contributions to American architectural design, and who in many instances entirely escaped the influence of the two above-named firms. Nevertheless there is no doubt that Messrs. McKim, Mead & White, and Carrère & Hastings occupy a position in recent American architectural history, essentially different from that of any of their associates. They constitute a class by themselves in respect to the volume and variety of their work. They constitute a class by themselves in the fact that their work has been peculiarly representative. They constitute a class by themselves, in that their work has been particularly formative in its influence. They both anticipated the lines, which in general the development of American architecture would travel, and by the force of their example they have helped American architecture to understand its proper method and its immediate goal, and to advance more quickly towards its attainment.

While, however, Messrs. McKim, Mead & White and Carrère & Hastings constitute a class by themselves in their relations to their contemporaries, the two firms are distinguished one from another by certain essential differences, both of purpose and of achievement. They are similar in the volume and variety of their work and the extent of their influence. They are similar in that both of them, after a preliminary period of hesitation, attached themselves definitely and finally to that vague, but significant stream of architectural tendency, which we know by the name of the Renaissance. But it should be immediately added that Carrère & Hastings attached themselves to a phase of the architecture of the Renaissance wholly different from that of McKim, Mead & White. The Renaissance passed through many different forms during the several centuries of its architectural development, and McKim, Mead & White did not identify their work specifically with any one of these phases. They were predominantly early Italian in their sympathies, but this bias did not prevent them from designing, when it suited their purposes, Roman, Palladian, Louis Seize or Georgian buildings. Carrère & Hastings, on the other hand, have been for the most part faithful in their allegiance to a certain phase of the French Renaissance; and this fact is symptomatic of a salient difference both of idea and of temper between the two firms. They consciously selected this phase of Renaissance architecture as the point of departure of their work, and they made this choice from certain definite and intelligible reasons. Moreover, in thus pur-

Copyright, 1909, by "The Architectural Record Company." All rights reserved.

Entered May 22, 1902, as second-class matter, Post Office at New York, N. Y., Act of Congress of March 3d, 1879.



PONCE DE LEON HOTEL (1887).

St. Augustine, Fla.

posely restricting the stylistic variety of their work, Carrère & Hastings have unquestionably taken a step in advance over the more eclectic practices of McKim, Mead & White. What American architecture needed was a constantly increasing definition of its authoritative forms, because only by such definition could the necessary and desirable mastery of any particular form be obtained. Whatever one may think, consequently, of the comparative merit of the work of these two firms, the general architectural policy of Carrère & Hastings must be pronounced to be in general an improvement on that of McKim, Mead & White. The former were the younger firm, who not only followed the example of their predecessor, but in certain respects bettered it; and the peculiar importance of Carrère & Hastings cannot be understood unless a careful explanation is attempted, both of the significance of the example set by McKim, Mead & White, and the significance of the improvement made thereupon by Carrère & Hastings.

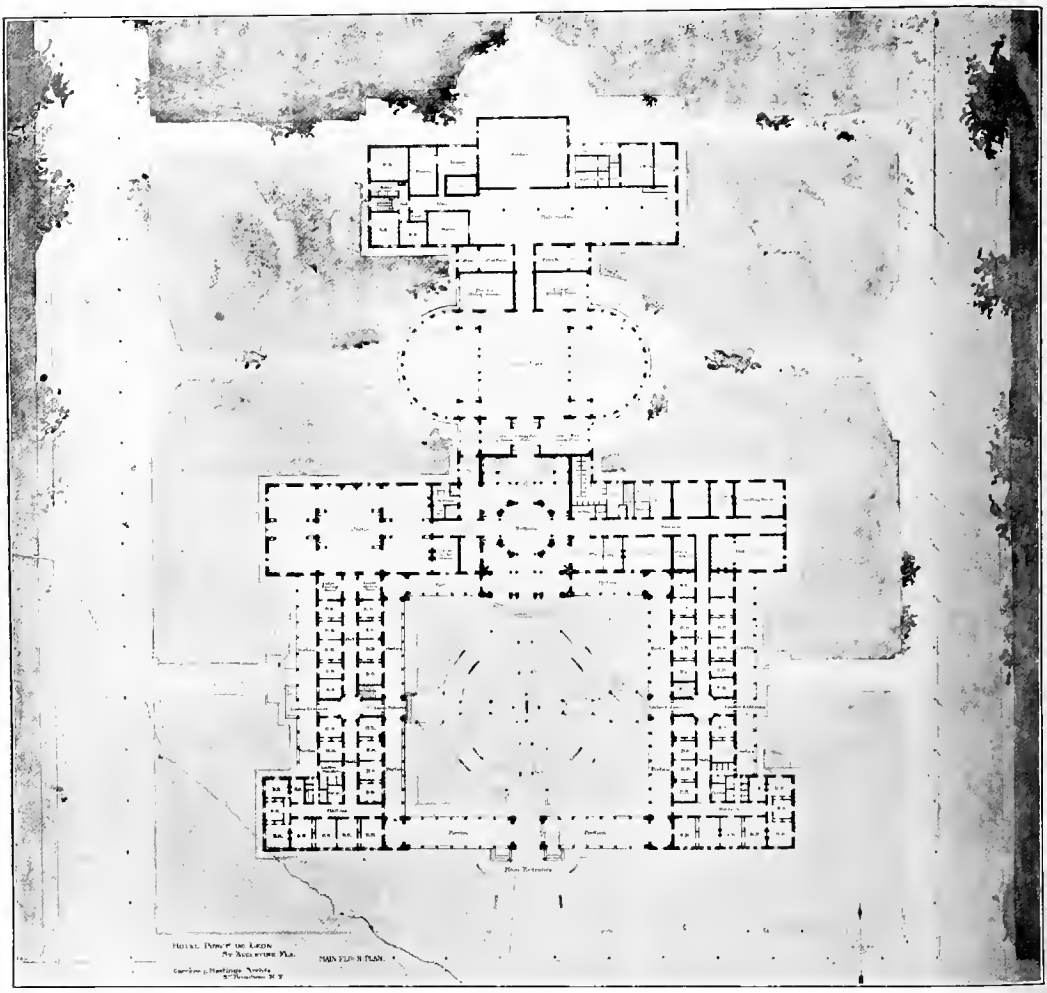
Critics, particularly foreign critics, of American architecture have usually been unable to discover any guiding idea back of its transformations, except that of a meaningless and indiscriminate imitation of European architectural forms; and they have usually assumed that any such characterization carried with it a substantially complete condemnation of all its works and practices. Any criticism which originates in such a general point of view makes the kind of mistake which tends to invalidate all of its subsequent judgments. American architecture has been imitative, of course; but it has been imitative of necessity and for excellent reasons. At times, also, this imitation has been indiscriminate and meaningless; but on the whole its use of European architectural forms has been gradually becoming more discriminate and more

PONCE DE LEON HOTEL—INTERIOR COURT.

St. Augustine, Fla.

significant. American architectural history has been the record of a development, and no criticism of an important individual architect has any chance of being just and edifying unless the critic understands the trend of this process of development, and the place therein which the individual architect has made for himself. Our first task must consequently be that of describing in a very general way the manner in which American architecture has developed, and the conditions which have determined its progressive transformations.

For American architecture to have started in anything but the imitation of foreign or European architectural forms would have been a violation both of precedent and of good judgment. In periods when communication was difficult and precarious, and when a people could assert its right to national development only by successfully defending itself against its neighbors or conquering them, imitation necessarily played a much smaller (although still by no means negligible) part in architectural development than it has during the past five centuries; but just in pro-

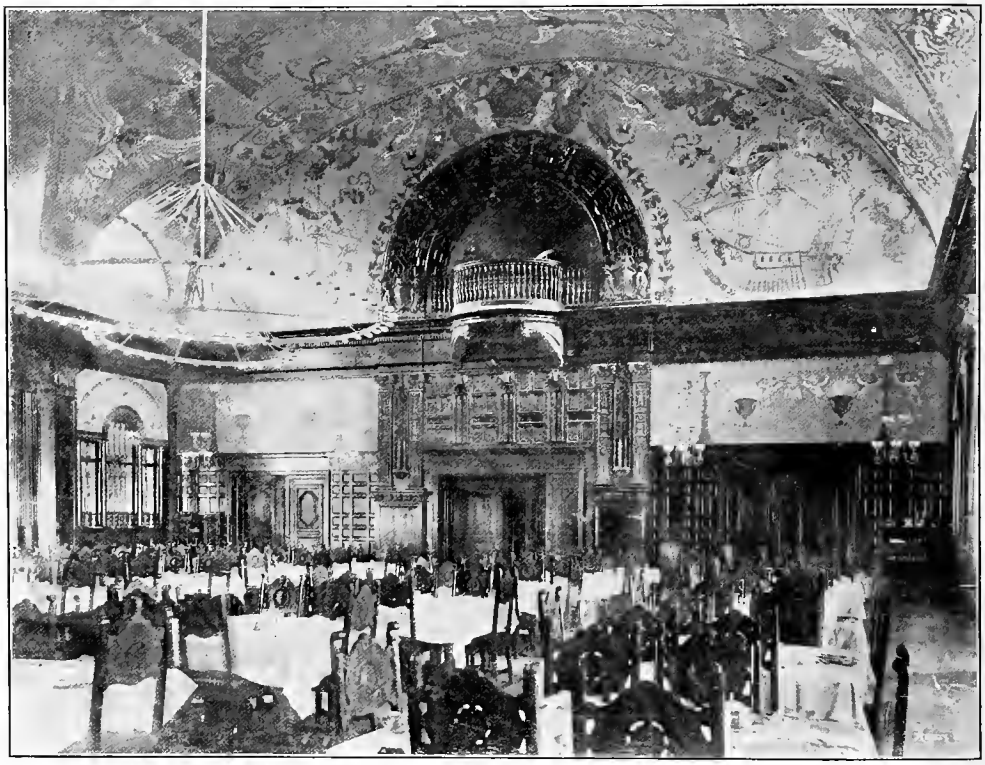


PONCE DE LEON HOTEL—MAIN FLOOR PLAN.

PONCE DE LEON HOTEL—ROTUNDA.

portion as intercourse among different peoples is safe, easy and quick, the peculiarly intelligent people is the one that knows what and when and how to borrow. The American colonists being the offshoot of Europe peoples, were obliged to borrow their whole stock-in-trade of ideas, laws and manners and technical forms and practices. In response to the imperative requirements of life in a new and undeveloped country, they soon began to modify the equipment in civilization, which had been brought across the Atlantic; but in the beginning they naturally modified that part of their equipment, which was the greatest immediate practical importance, viz.: their political and economic ideas, their manners and their laws. In respect to technical forms they remained colonists long after they had become politically and economically independent. Down to the present day they have not escaped a certain necessary colonialism in their technical ideals and practices, and for special reasons their architectural methods have remained even less independent than has been the case with the other arts.

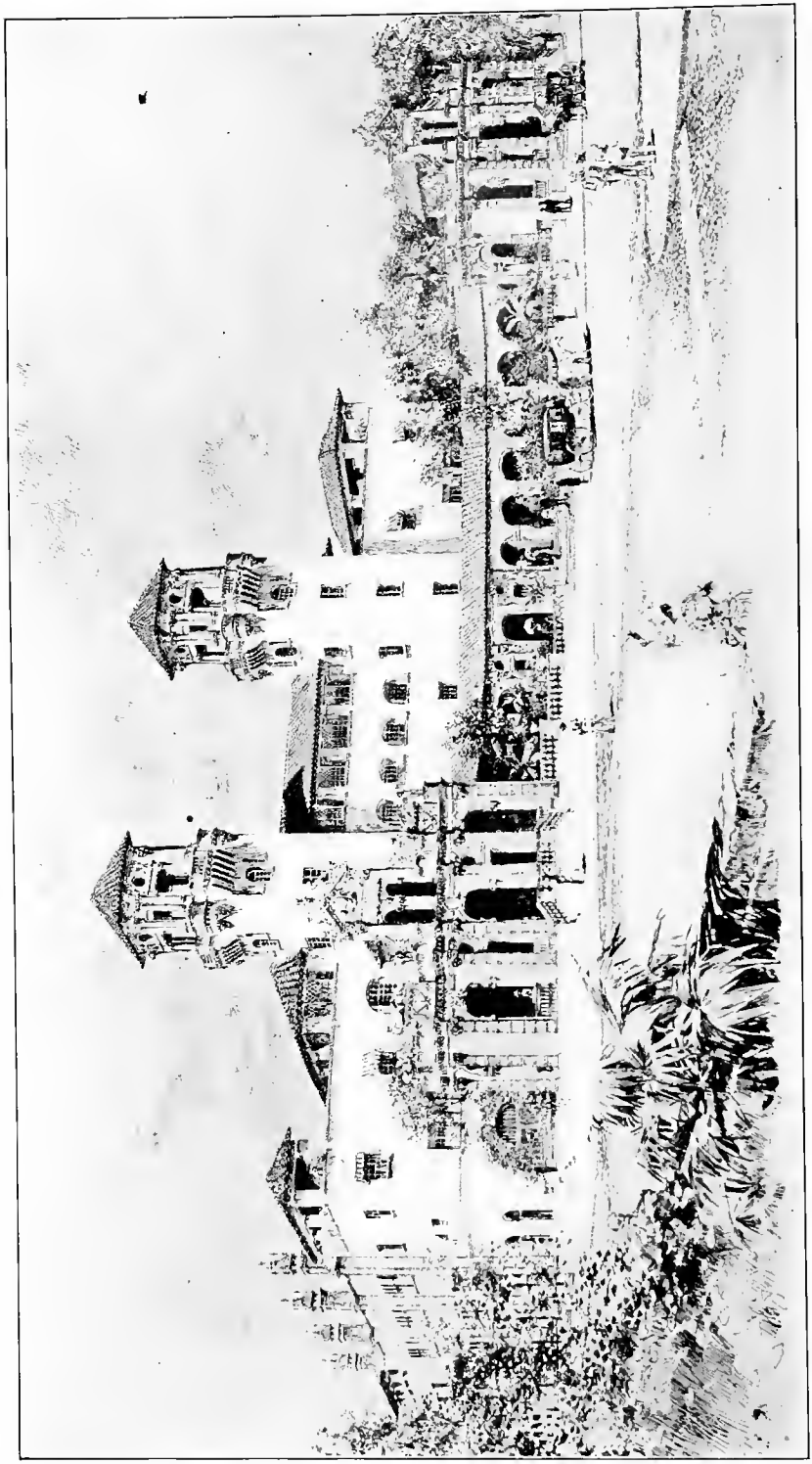
One of the strongest influences working on behalf of the nationalization of any art is the endeavor of its practitioners to express a peculiarly local subject-matter; and it is this endeavor which has been responsible for whatever national character Americans have been able to impart to their sculpture, painting and literature. But architecture in a sense has no subject-matter. Like music it is an art in which no valid distinction can be made between subject-matter and form. The architecture of any country and that of the United States in particular has peculiar conditions to meet, local mate-



PONCE DE LEON HOTEL—DINING ROOM.

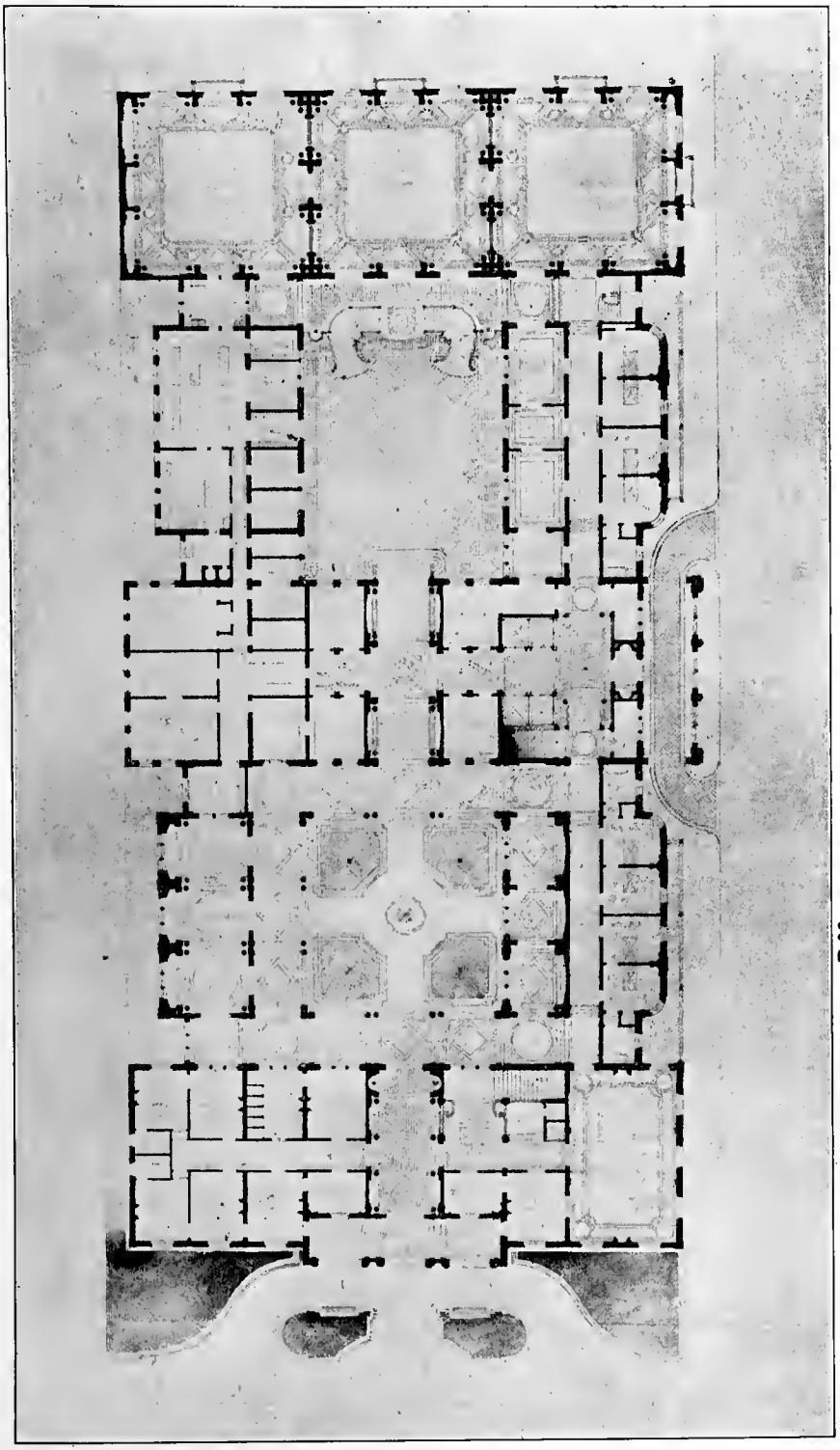
METHODIST CHURCH (1887).

St. Augustine, Fla.



THE ALCAZAR HOTEL (1888).

St. Augustine, Fla.

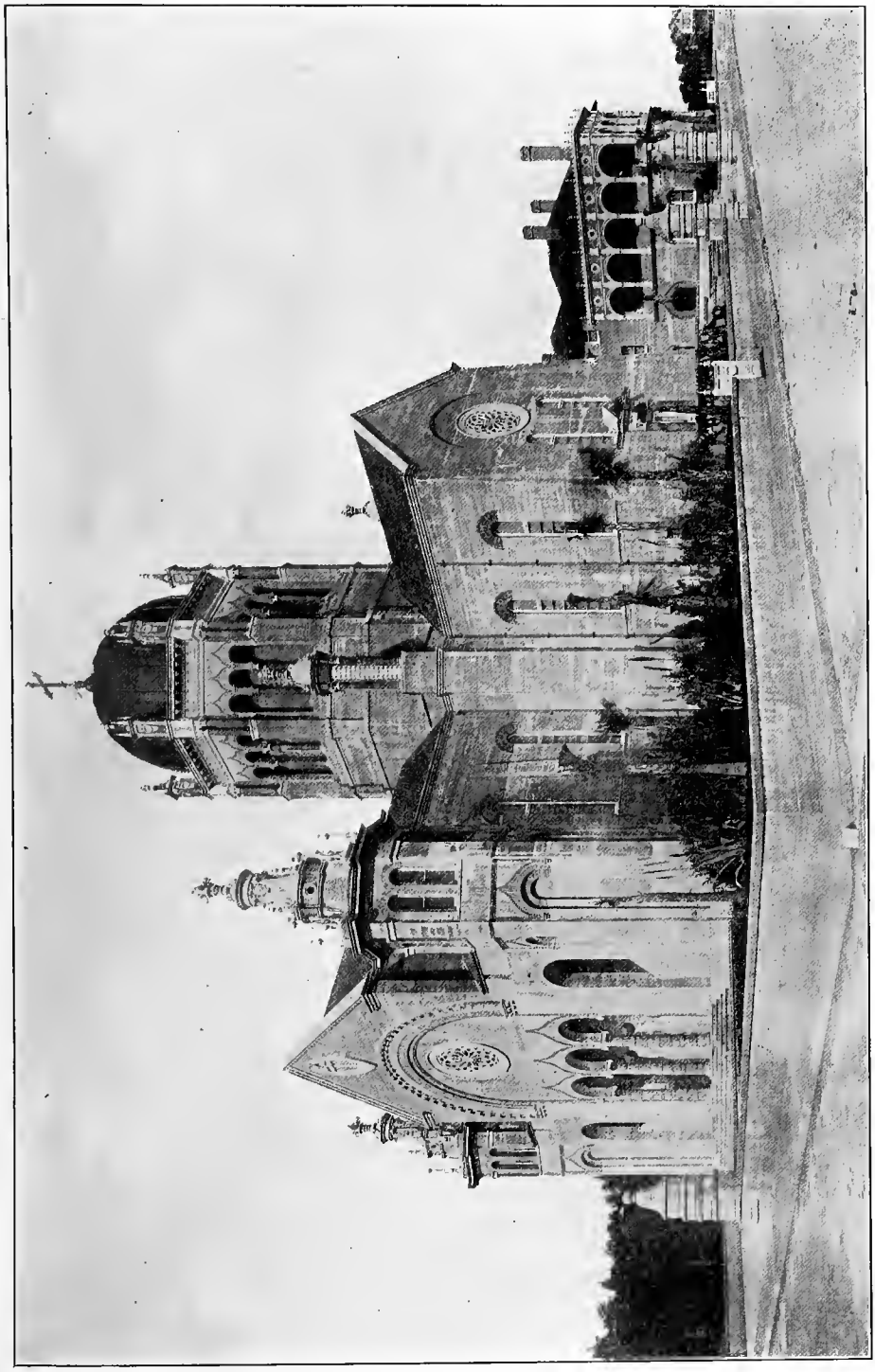


Jefferson ~~Alcazar~~ HOTEL—GROUND FLOOR PLAN.

St. Augustine, Fla.

rials to master and novel problems to solve; and in this sense it can be said that American architecture has a special and local subject-matter. But these local conditions, materials and problems have no intrinsic and independent interest for the public, apart from the forms in which they are embodied. They provide the architect with his difficulties and his opportunities; but they do not provide him with any independent means of winning public attention. While the novelist who writes in the English language can gain a hearing by writing about familiar American subjects, the architect can gain a hearing only by means of his peculiar use of his appropriate language. He is as much tied to certain conventional forms of expression as the man of letters is to the English vocabulary and grammar. If he used any

WEST END CHAPEL (1889).
West 105th St., New York City.



PRESBYTERIAN CHURCH (1890).

St. Augustine, Fla.

other forms he would not be understood, and he would in addition run a grave risk of not understanding himself, and he cannot make those familiar forms look fresh merely by the help of peculiarly fresh material. His work is not essentially any more imitative than that of a painter or a novelist. All American technical methods and forms are borrowed; but the architect has no way of concealing his borrowing.

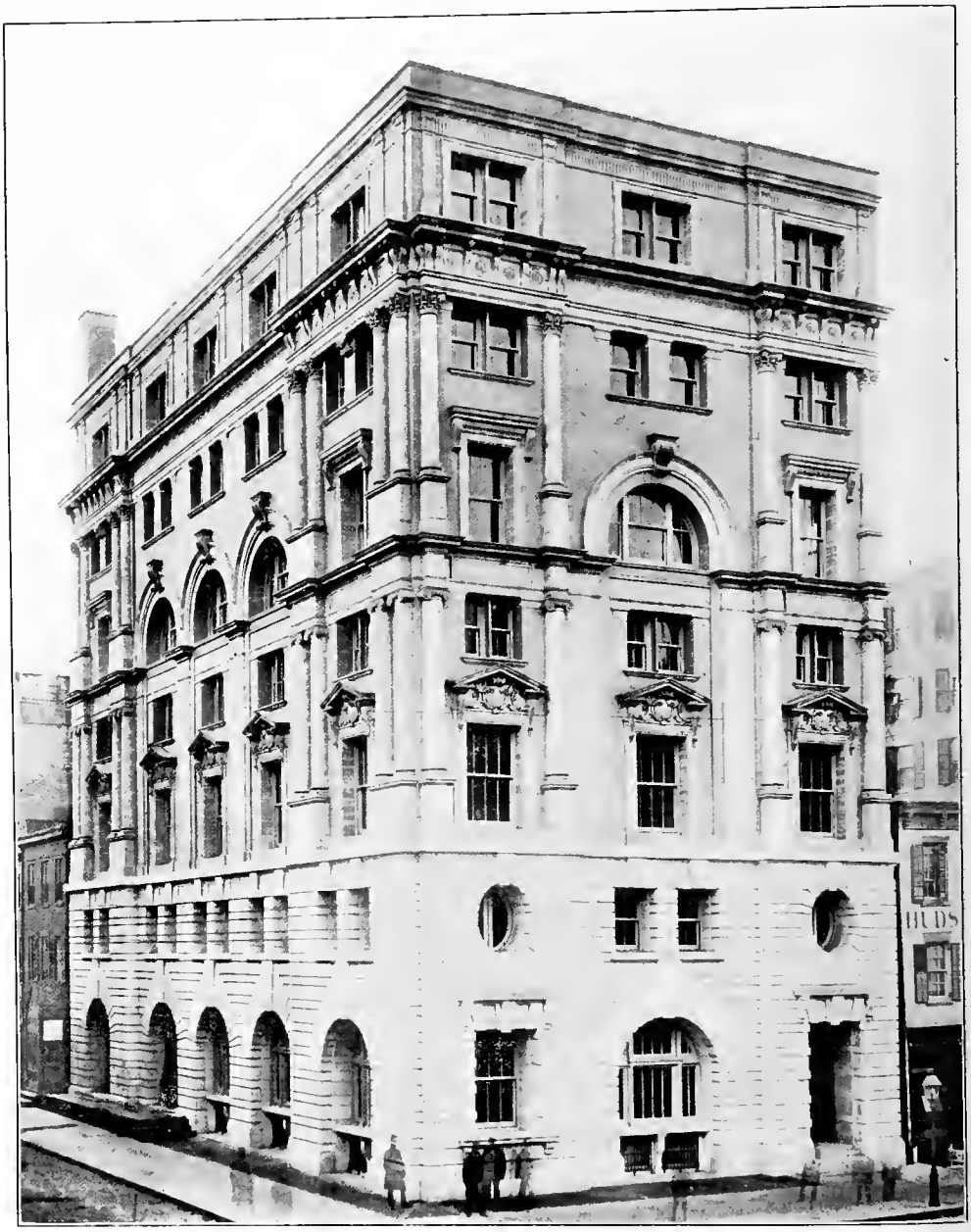
American architects have no reason to be apologetic about the alien source of their technical methods and forms. There was nothing else for them to do, and they have only followed the example of the European architects of the past several centuries. All architecture since the Renaissance has been imitative in method and alien in origin. Good architecture has consisted, first, in the selection of those forms best suited to the local purposes, and then in the peculiarly consistent, idiomatic, realistic, and beautiful rendering of the adopted style. The distinction of modern French architecture is due to the fact that for some centuries French architects have on the whole been more consistent, more capable and more intelligent in their imitation than have the architects of other countries, and whatever distinction American architecture has any chance of attaining must depend upon the display of similar merits. As a matter of fact, American architectural development has depended upon the display of similarly meritorious qualities. It would have been absolutely fatal for American architecture in the beginning to have been anything but a reproduction of

CENTRAL CONGREGATIONAL CHURCH (1891).
Providence, R. I.

traditional European forms, because native forms were entirely lacking. The only way a local tradition could be introduced was by the gradual transformation of the more appropriate European styles. A national architecture cannot be constructed merely by the intelligent adaptation of local materials and building methods to local practical problems. In order to be interesting, buildings must be charged with human associations; and it is by the power which certain architectural forms have of arousing such associations that they are endowed with warmth and life to the architect and his public. Thus the fact that America was a new country increased rather than diminished the necessity for a systematic policy of imitating traditional European forms; and once the practice was begun, it had to be carried through to its logical con-

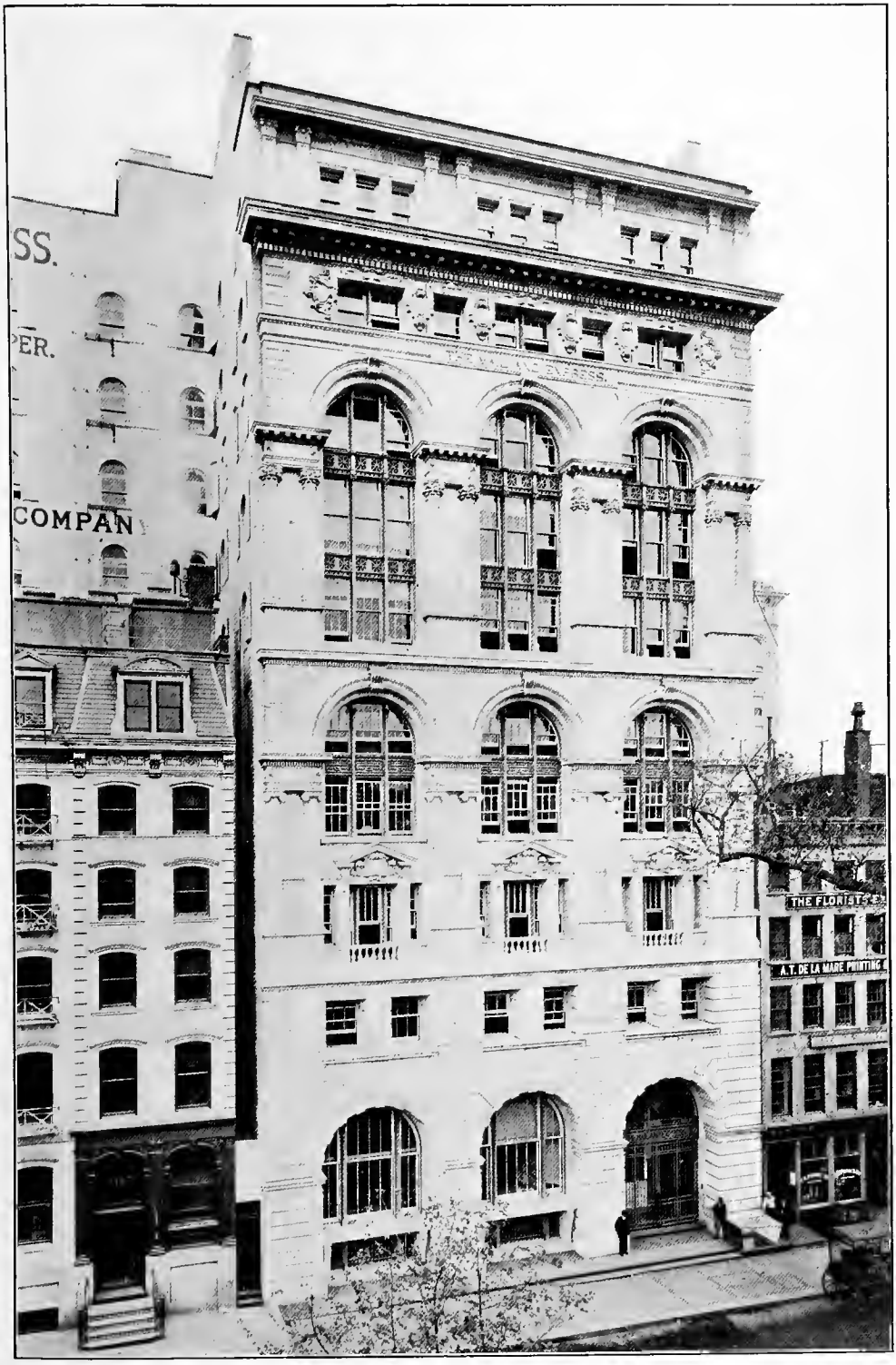
CENTRAL CONGREGATIONAL CHURCH (1891).

Providence, R. I.



PIERCE BUILDING (1891).

Hudson St., New York City.



MAIL AND EXPRESS BUILDING (1891)—FULTON STREET FACADE.
Fulton St. and Broadway, New York City.

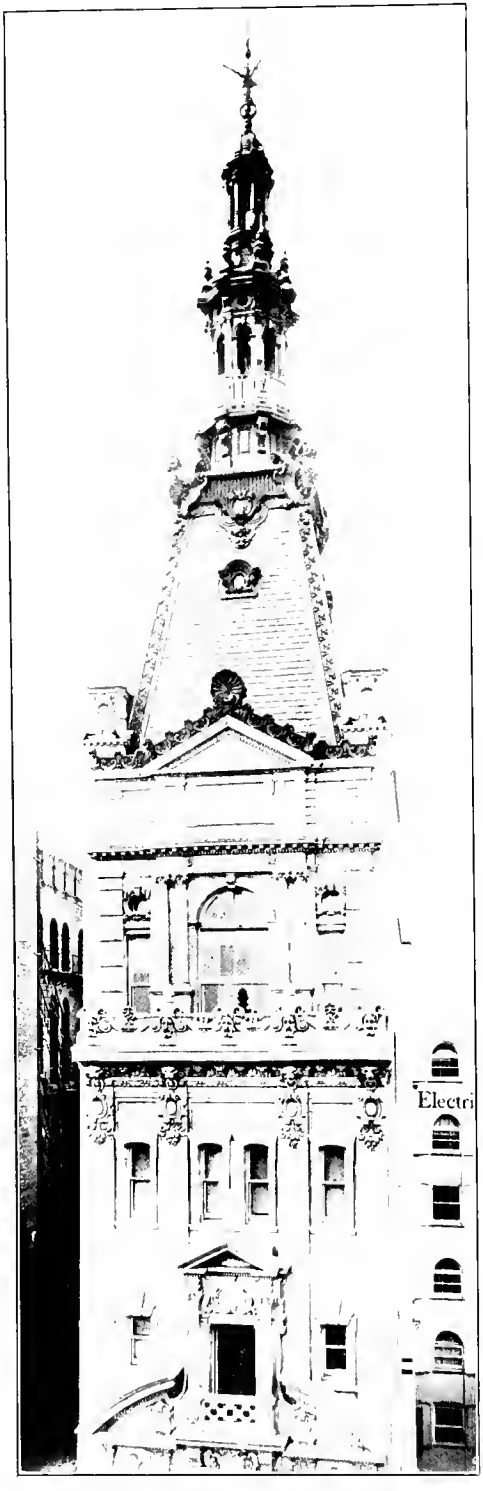
clusion. It had to be continued, until both the architect and his public became tired of mere imitation, and sought to discriminate between imitation which had become an indiscriminate, mechanical and useless copying of European styles and one which exercised both an intelligent discrimination among these styles, and which began the process of intelligently adapting them to American conditions and needs.

As a matter of fact, American architecture has passed gradually from a habit of indiscriminate and incompetent imitation into a conscious practice of more discriminate and more competent imitation. In the beginning it was Georgian, because the colonies were or became English colonies; and it was as natural for an American merchant to build a Georgian house as it was for an English merchant. It continued to be Georgian for a decade or two after 1789, because Americans knew no other way of building; but the tendency to add porches, supported by huge columns, provided the transition to the next step. The Classic revival followed, in the adoption of which the American architect was merely obeying an imitative idea, which extended to Europe as well, and whose adoption could be defended by a vague association between democracy and classicism. It was a mistake, of course, but it was a mistake which was partly redeemed by the single-mindedness and sincerity with which it was accepted; and because of this sincerity, American architecture owes some of its best buildings to the Classic revival. As it happened, however, the Classic revival was coincident with social and economic changes in American life, which temporarily brought about a debasement of all technical and intellectual standards. The Classic revival was succeeded by a period of wholly indiscriminate, unintelligent and incompetent imitation of European styles; and this fact was particularly unfortunate, because it occurred in the decade preceding and succeeding the war, when the increase of wealth in the Eastern States resulted in a revival of house-building. The commercial architects of the time used to advertise that they kept in stock plans for all kinds of houses, in any known style. It was not enough to offer the public a choice between a "Greek," a Gothic and an Italian villa. Swiss chalets and Oriental kiosques were considered necessary for the satisfaction of the American democrats' varied individual tastes in houses, and in certain cases, such as "Armsmear," near Hartford, deliberate attempts were made to combine Classic Gothic, Italian, Swiss and Oriental features in one single building. But such aberrations occurred toward the end of this phase of American architectural history, which was due to a temporary obliteration of all technical, intellectual and artistic standards—literature alone excepted.

During the decade immediately succeeding the war, a beginning was made towards the re-establishment of a higher technical standard in architectural design, and towards a more intelligent and selective habit of imitation. Certain architects, many of them of English birth, and all of them more or less under the influence of Ruskin, began a much more sincere attempt to introduce an American Gothic tradition than any which had yet been made; and in so doing they were really taking up the thread of American architectural development at the point where it had fallen from the hands of the Classic revivalists. Their influence, reinforced by that of Eastlake in interior decoration, dominated what architecture there was in this country almost to 1880. It had the advantage of being more scholarly, better equipped, and more earnest than any movement which had yet made a contribution to American architecture; but its effect was rather moral and technical than stylistic. The younger men brought up in the offices of these Gothic revivalists rarely remained true to the stylistic bias of their masters; but they inherited a sounder technical equipment and an equal amount of sincerity and enthusiasm, and they added thereto a still livelier disposition to individual self-expression.

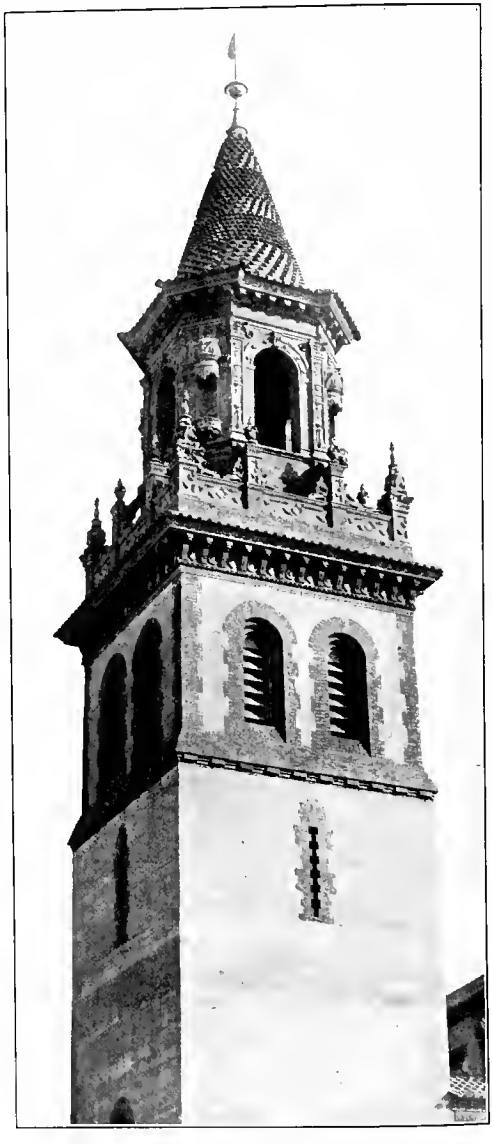
The phase which succeeded the Gothic revival is confused and is characterized

MAIL AND EXPRESS BUILDING, BROADWAY ENTRANCE.



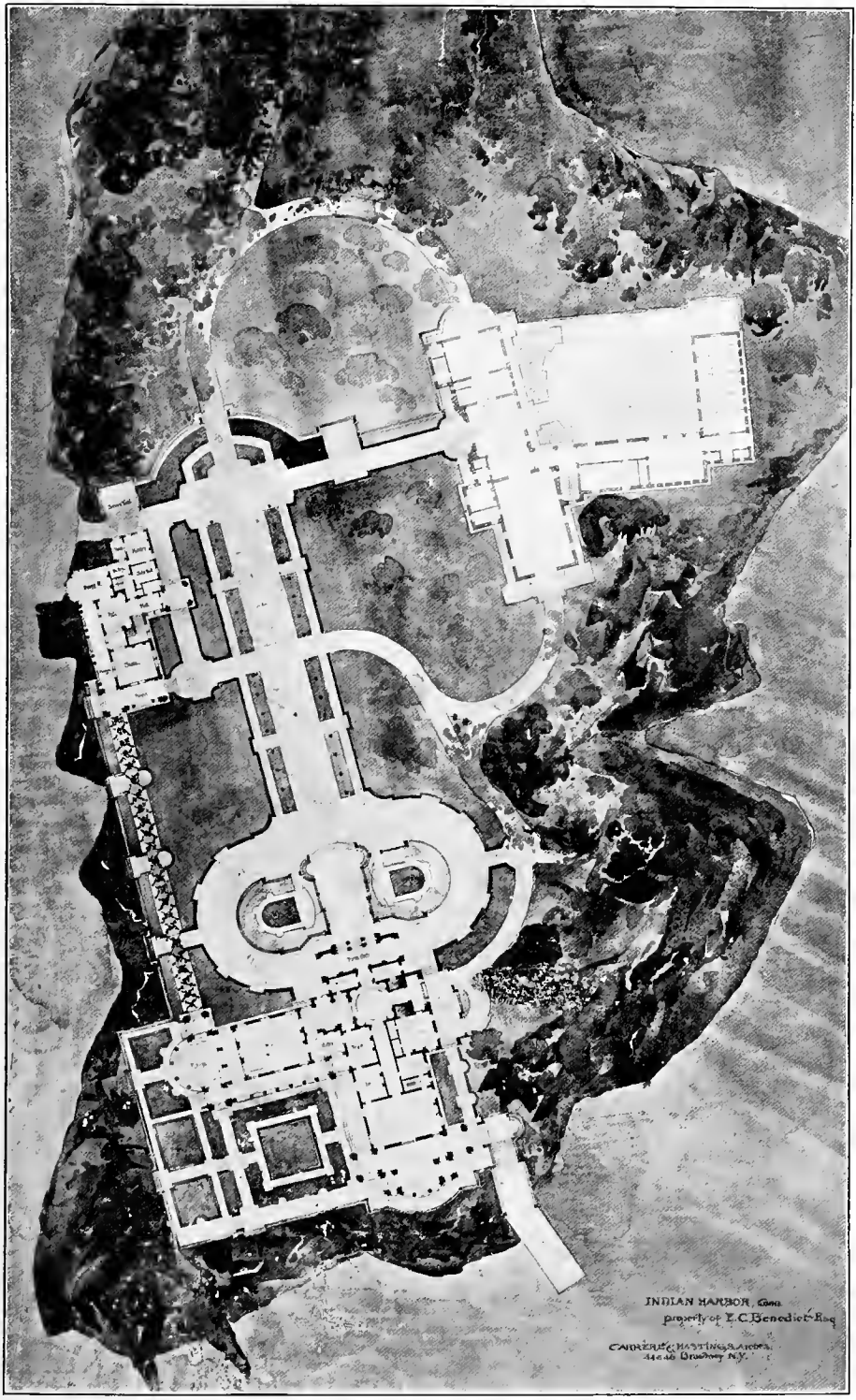
Mail and Express Building—Tower.
New York City.

by conflicting tendencies; but it becomes comprehensible in the light of the development of American architecture after 1885. These intervening years were remarkable for the tremendous power ex-



Methodist Church—Tower.
St. Augustine, Fla.

ercised by one man—Richardson—who, by the force of his example, added the weight of the Romanesque revival to the series of our architectural experiments. But this experiment was at bottom no more than a personal *tour de*



ESTATE OF E. C. BENEDICT, ESQ. (1891).

Greenwich, Conn.

The House From the Entrance.

Formal Garden.
RESIDENCE OF E. C. BENEDICT, ESQ. (1891).
Greenwich, Conn.

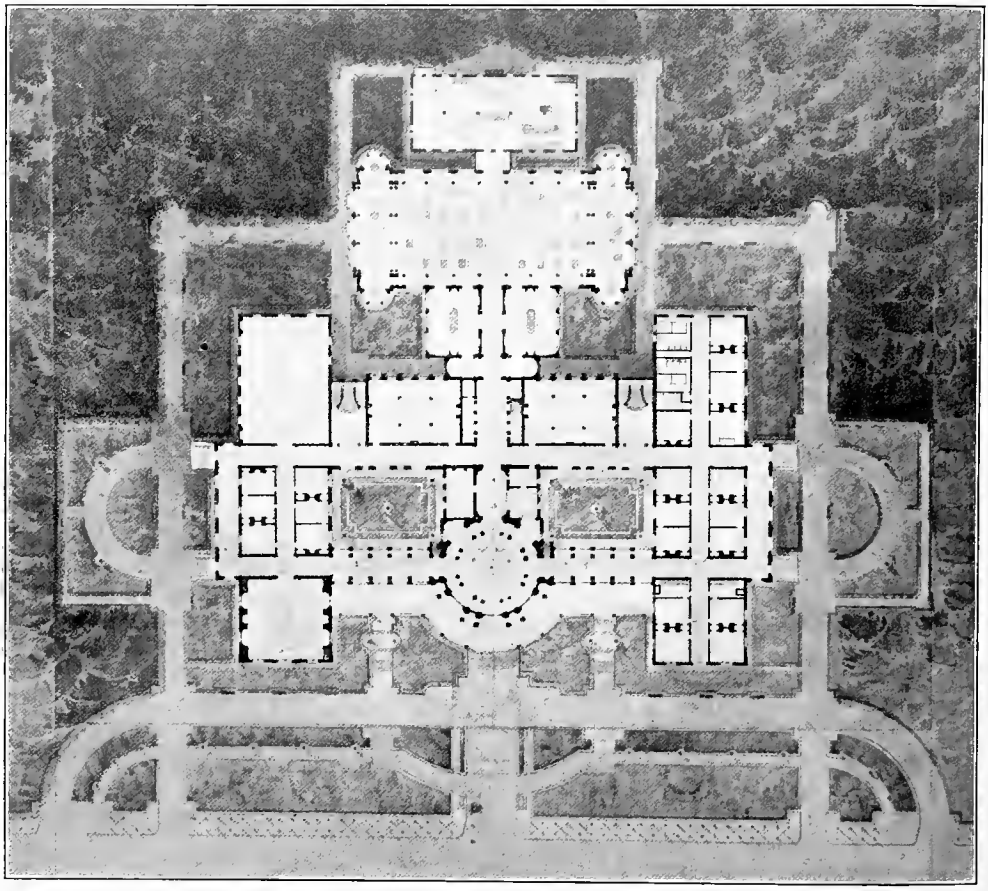
force. While the Romanesque revival did not long survive the death of its originator, the individual power exhibited by Richardson had its analogies in the work accomplished at that time and later by such architects as Root, Babb, Haight, Cope and Post. The work of all of these and other similar designers has been characterized by great power and consistency in the expression of a single style; but they belong to the period whose most vigorous exponent was Richardson. Richard Morris Hunt must be attached, chronologically, to this same group, but the influence of his work was different, because it combined less individuality with more eclectic tendencies—a more scholarly knowledge, and wider sympathies.

All of the able designers mentioned above were traditionalists, in that they made no attempt to depart from the American convention of imitation; but most of them sought, by the force of their own example to recommend to their associates and the public, one particular architectural style. And for this very reason the result of their experiments was by way of being chaotic and confusing. It was reserved for another firm to bring to this "battle of the styles" the force of still another example—the force, that is, of a very special interest in the Italian Renaissance. The firm of McKim, Mead & White belongs, in its origin, to the group of architectural contemporaries and successors of Richardson, which has been mentioned above. Its earlier work was characterized by a bias towards the freer architectural forms which had found favor with the majority of that group; and only after some years of joint practice did the work of the firm exhibit a marked predilection for the models and forms of the Italian Renaissance. When this tendency first appeared, the contemporary critic might have supposed merely that one more combatant had been added to the "battle of styles"; and this account of the matter would not have been wholly devoid of truth. But it was also true that the new belligerent was destined to put up a much more successful fight than his older rivals. Neither was its comparative success due merely to the

RESIDENCE OF E. C. BENEDICT, ESQ.—WATERFRONT VIEW.
Greenwich, Conn.

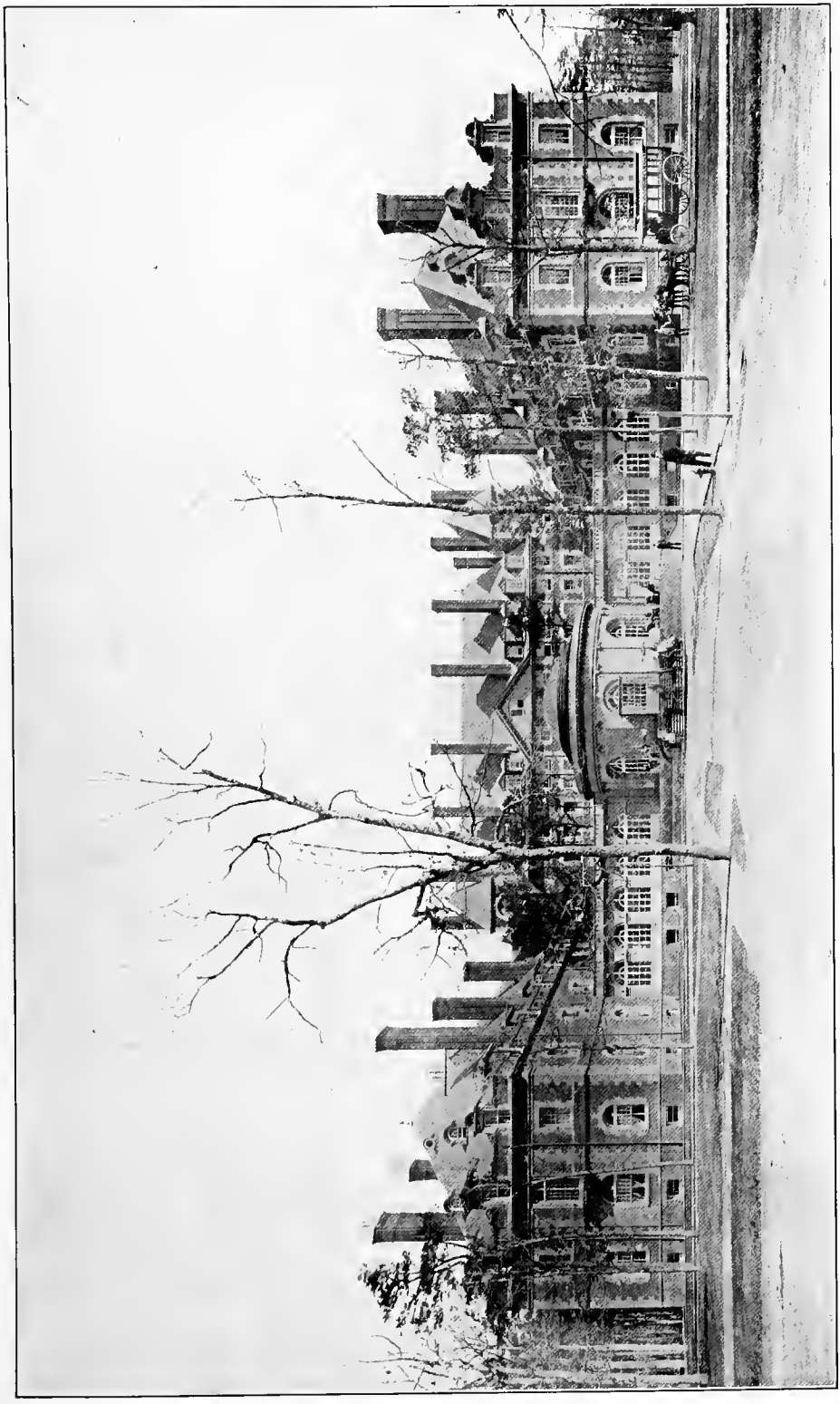
great ability of the individual architects, in whose buildings the early Renaissance forms were embodied. The profound sympathy and understanding which McKim, Mead & White had for Renaissance architecture had much to do with the influence which their work had upon their associates and successors; but of equal, if not greater, importance was the fact that they popularized by their example a specific tradition, much better adapted to American needs than any or all phases of the Gothic, Romanesque or purely Classic architecture.

The architectural tradition of the Renaissance was peculiarly adapted to American needs for many different reasons. In the first place, the intellectual life of modern Europe and America actually began with the Italian Renaissance; and it is only by virtue of an almost heroic effort of the imagination that a contemporary individual can bridge the distance which separates him from the Middle Ages. The task is not beyond individual power; and it is to be hoped that peculiarly gifted men will persist in the attempt to renew those ideals and forms of mediæval life which are worth perpetuation. But they should not for the present expect many imitators, and they must be content to acquire that kind of goodness which is inseparable from loneliness. Their example is in truth incompatible with the spirit and tendency of modern life, and in particular of modern architecture. Modern architecture, European as well



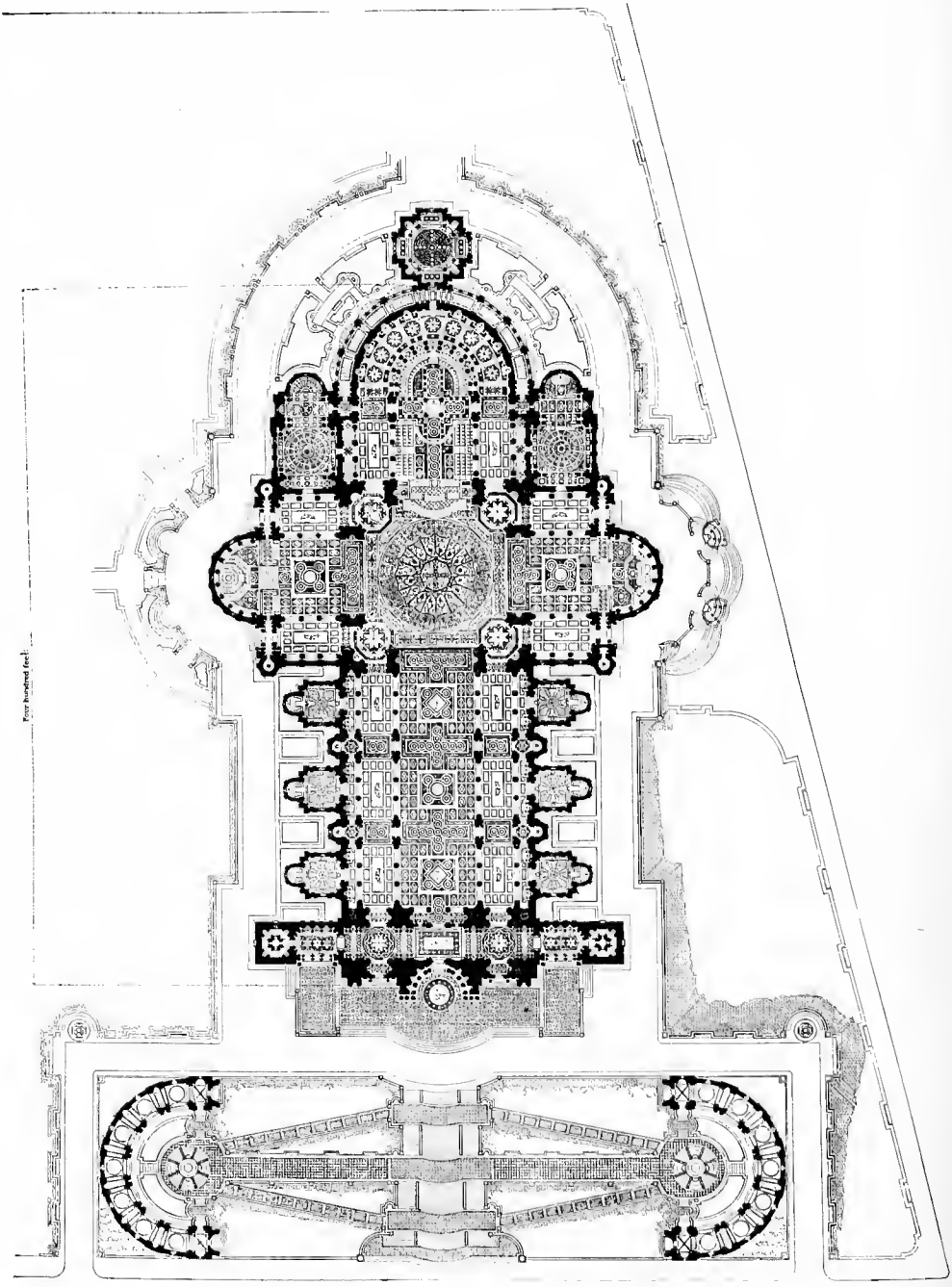
LAUREL-IN-THE-PINES—FIRST FLOOR PLAN.

Lakewood, N. J.



LAUREL-IN-THE-PINES (1891).

Lakewood, N. J.



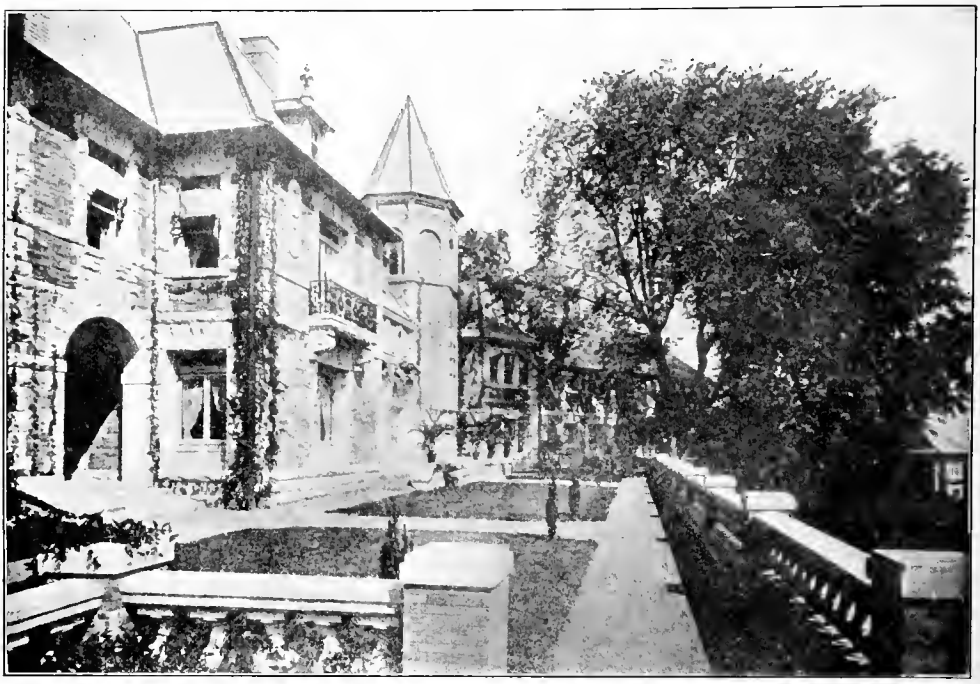
COMPETITIVE PLAN FOR THE CATHEDRAL ST. JOHN THE DIVINE.
New York City

as American, is necessarily imitative; and the work of imitation has a logic of its own, which cannot be violated with impunity

Ideals, examples and forms capable of fruitful imitation must possess a certain flexibility and universality. They must be the result of general and widely diffused intellectual sympathies and ideals, instead of highly specialized intellectual sympathies and ideals. Now the ideals and sympathies of the Renaissance were themselves imitative, flexible, universal and broadly sympathetic. They were the result of a partly artificial attempt to revive Roman traditions, forms and examples; but the attempt was less artificial than it seemed, because the Roman influence in the civilization of the fifteenth century was alive, but submerged. It was merely brought to the surface by the Renaissance; and the success of that period in renewing a long-distant past, without losing the quality of being modern and contemporary, was a triumph for conservative intellectual reform. It showed that a people could be imitative without any necessary sacrifice of individuality, and that they could be innovators without losing touch with a corrective and leavening tradition.

COMPETITIVE DESIGN FOR THE CATHEDRAL OF ST. JOHN THE DIVINE (1892).
New York City.

The Renaissance revival initiated by McKim, Mead & White made, consequently, a much livelier and more permanent appeal to the American public



RESIDENCE OF JOHN PITCAIRN, ESQ. (1893).

Jenkintown, Pa.

AMHERST CHAPTER HOUSE (1888).

Amherst, Mass.

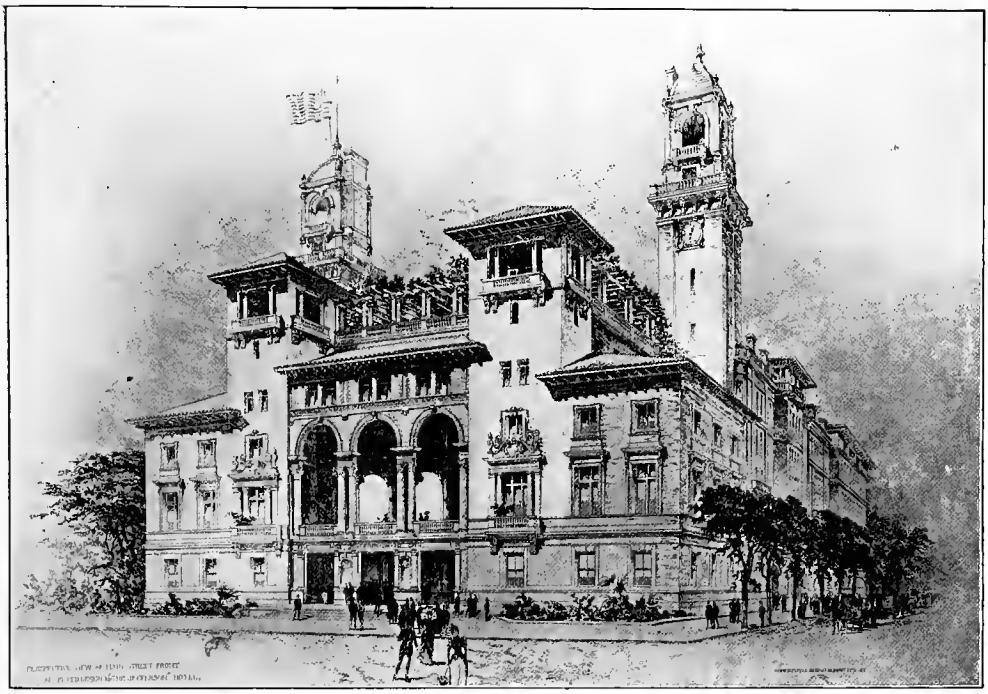
RESIDENCE OF MRS. R. H. TOWNSEND (1893).
Washington, D. C.

KUNHARDT MAUSOLEUM (1896).
Moravian Cemetery, New Dorp, S. I.

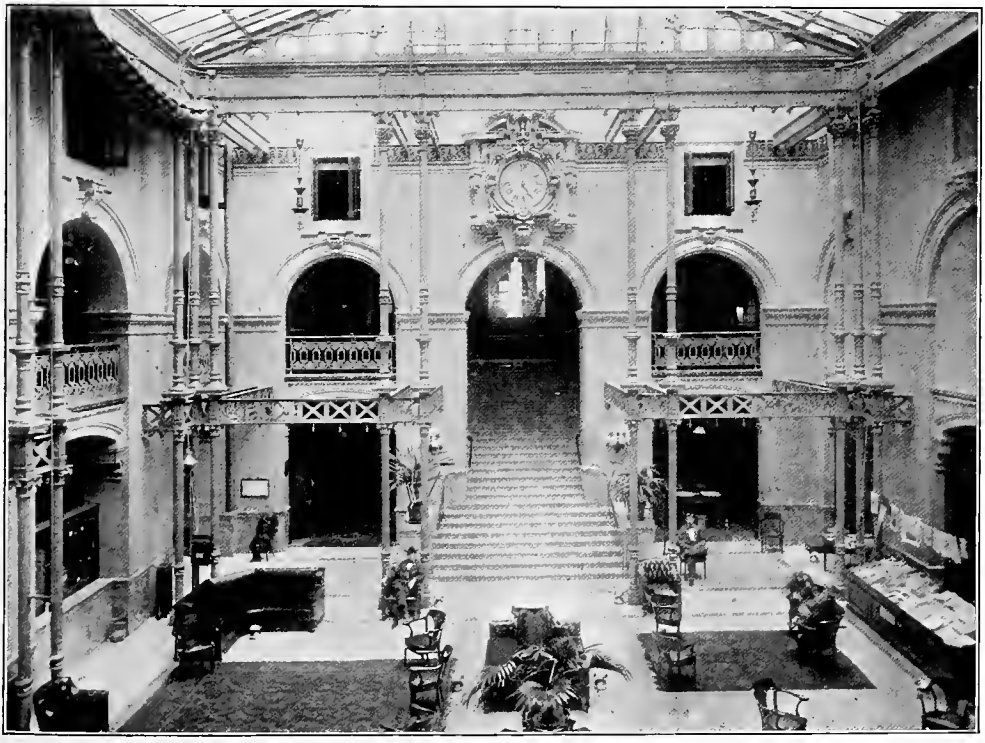
than had the preceding Classic, Gothic and Romanesque revivals. It placed before them familiar and beautiful architectural forms, which could be successfully imitated without any extraordinary individual imaginative effort, but which at the same time worthily embodied the spirit of a great architectural movement. McKim, Mead & White were not, like Richardson, imposing an individual preference on a fascinated but restricted body of admirers. They were interpreting to the American public the lesson in architectural history which it had to learn. They were anticipating the American need of an architectural style which could be imitated without either being falsified or re-created in the process; and for that reason their influence has been much more formative than that of any of the group out of which they issued. Their example was not only, like that of Richardson, influential, because it was powerful; but it was even more influential because it was prophetic. It was based upon a correct criticism of the comparative value for the purposes of modern American architecture of the several leading architectural traditions.

It rarely happens, however, that the full consequences and meaning of any innovation are brought out in the work of the original innovator; and, as a matter of fact, such has been the case with McKim, Mead & White. Representative as they were, on the whole, of the better architectural purposes of their day, and prophetic as their work was of the actual course of American architectural development, both the lesson and the prophecy failed in certain respects of being complete. For one thing, the Renaissance, both in architecture and in even other departments of technical work, has stood for very many different tendencies. If it be admitted that a sane critical judgment will select the Renaissance as the most available point of departure for American architecture of the present and the future, the further question remains to be asked whether every aspect of the Renaissance is equally available for the purpose. Should the selection be carried any further? Are there any good reasons for preferring any one to any other phase in the development of Renaissance architecture? The answer which the work of McKim, Mead & White makes to such questions cannot be other than ambiguous. On the whole, the aspect of the Renaissance with which they were most in sympathy was its earlier Italian phase, and this preference dominates their work. But they have not been excluded thereby from borrowing the forms of almost every other architectural phase of the movement. They have not scrupled to build French seventeenth century châteaux and Georgian mansions, as well as early Italian villas, while in other cases there is obviously an ingredient in their work derived from Palladio and his imitators. Nor is this all. In two or three conspicuous buildings they have preferred to go direct to Roman models for inspiration, and in at least two cases with peculiarly conspicuous success. Hence it would seem that they could not attach much importance to the selection of any one phase of Renaissance architecture as better for American purposes than any other phase. They preferred, in this respect, to keep their liberty; and they retained in this choice a surviving trace of the mixture of individualism and eclecticism which had characterized in general the group out of which they had issued.

In another respect, also, McKim, Mead & White failed to be representative of the later tendencies in American architectural development. They have not had, to the same extent, the benefit of the school training which has had such a profound influence on so many of their contemporaries and followers. By the foregoing statement, we do not mean, of course, that they were not sufficiently well-informed and well-equipped architects in every technical respect. Neither do we mean to affirm that the school training which the great majority of the younger architects have enjoyed has been wholly advantageous to the quality of their work. The fact remains, however, that like the majority of the group from which they issued, they received the best part of their schooling in the



JEFFERSON HOTEL (1893).



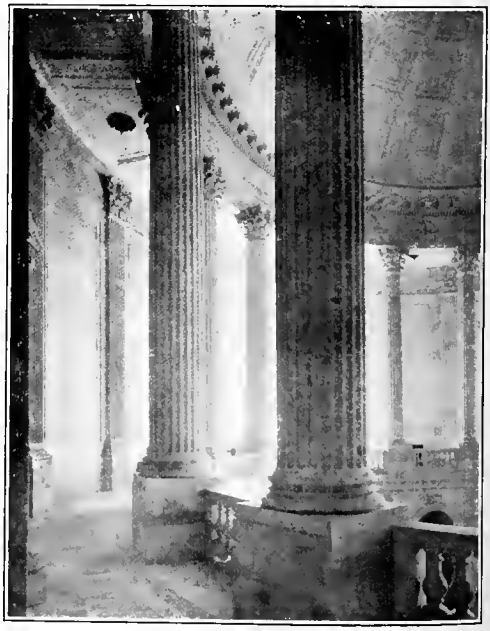
JEFFERSON HOTEL—GLASS-COVERED INTERIOR COURT.

Richmond, Va.

Jefferson Hotel—Upper Court.
Richmond, Va.

offices of older architects, and in this respect they differed from their younger associates. Within certain limits, the comparative absence of school training was, considering the kind of work they were destined to do, an advantage to them. In all probability they would never have expressed so freely, so spontaneously, and so sympathetically varied aspects of the Renaissance tradition, in case they had been passed through the rigid discipline of the school; and in that event they would have exerted a less powerful personal influence on the course of American architectural transformation. But, on the other hand, the extent to which they were sympathetically possessed by the spirit and the architecture of the early Renaissance had at least one less desirable effect upon their work. They were fascinated by the effect of these Renaissance buildings, and they sought, above all, to reproduce a similarly seductive and persuasive effect in their own version of these traditional forms. They succeeded brilliantly, but their success entailed certain penalties. In order to obtain the effect they were frequently far less scrupulous about the economy and the propriety of their plans than a school-trained architect would have dared to be. On the whole, they tended to sacrifice plan to design, and to consider a building chiefly as a matter of a handsome exterior. Assuming that some such sacrifice was necessarily associated with their brilliant and peculiar success, and with the powerful influence they exerted, the game was assuredly worth the candle; but a technical method, which was in their case justified by its results, might well be demoralizing to less capable imitators. As a matter of fact, very few of the younger architects followed their example in this respect. The more rigid training of the latter saved them from the danger of over-emphasizing an aspect of a complete building, which, essential as it is, should in the interest of thoroughly good work be made subordinate to the plan.

The younger associates of McKim, Mead & White have, consequently, varied from the practices and example of



Senate Office Building—Rotunda.
Washington, D. C.

RESIDENCE FOR RICHARD M. HOE, ESQ. (1893).
11 East 71st St., New York City.

LIFE BUILDING (1893).
17 West 31st St., New York City.

that firm chiefly in two respects. They have tended to restrict the choice of their adopted forms to much narrower limits; and in general they have preferred the French to the Italian phase of the Renaissance. Moreover, their preference for the French architectural tradition has been the natural result of their school training at the Beaux Arts in Paris, and this training, whatever its disadvantages, effectually prevents its beneficiaries from any such transposition of fundamental architectural values as are involved in the sacrifice of the plan of a building to its design—which is, at bottom, equivalent to the sacrifice of the function of a building to its appearance.

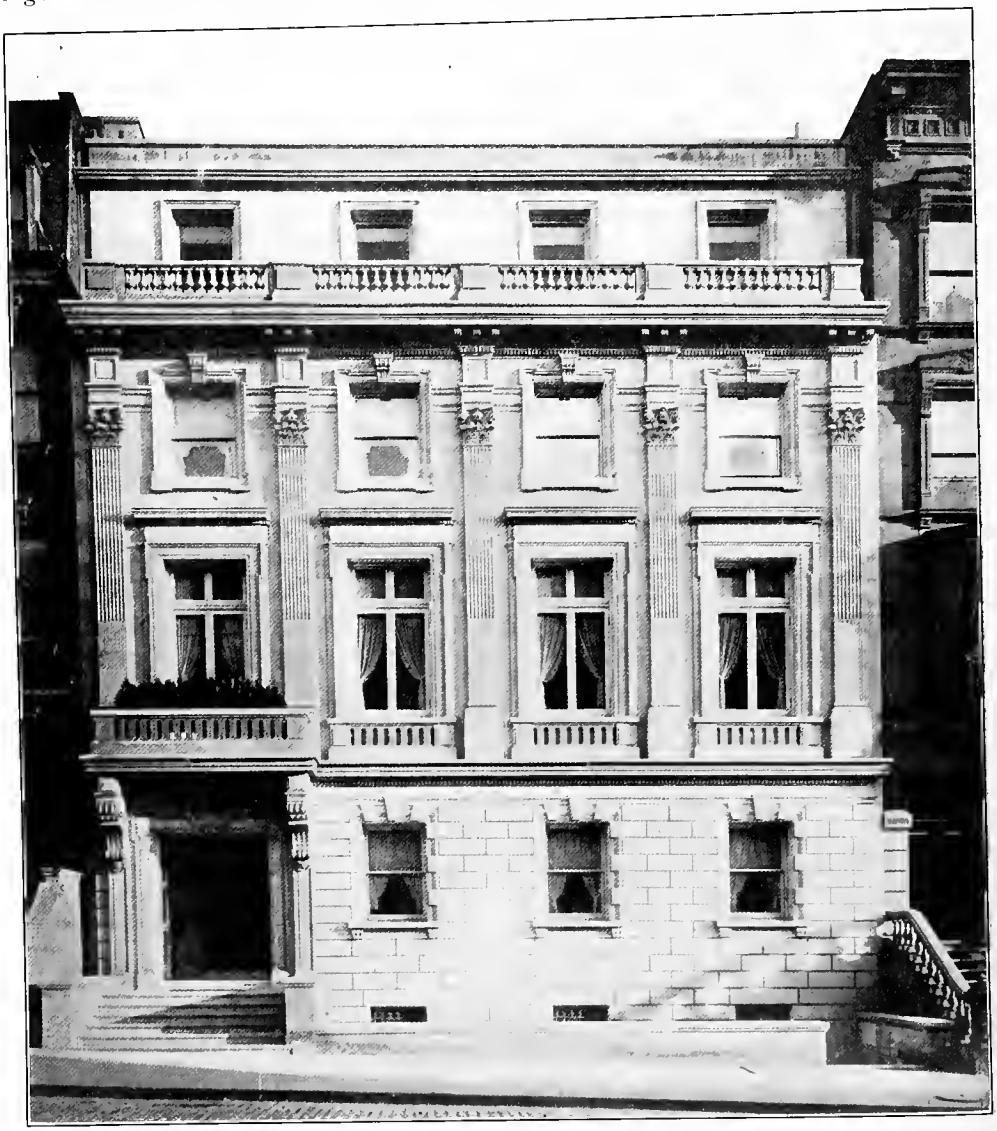
PATERSON CITY HALL (1893).

Paterson, N. J.

* * * * * *

The foregoing account of the predecessors and contemporaries of Messrs. Carrère & Hastings was a necessary preliminary to a specific description of

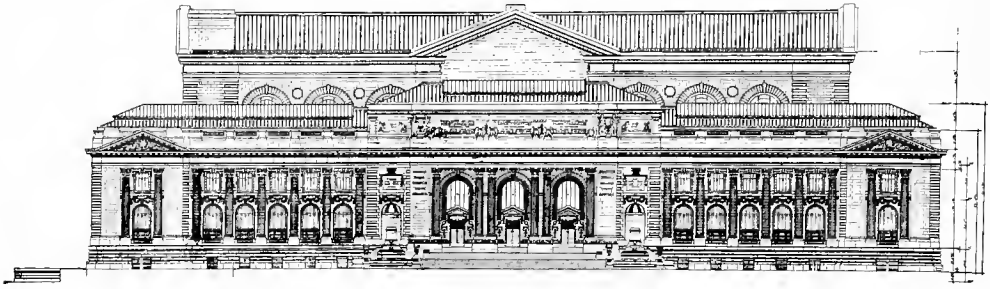
the meaning and quality of their work and of their place in American architectural development. As was stated in the opening section, Carrère & Hastings have shared with McKim, Mead & White the distinction of being the peculiarly conspicuous and successful architects of their own day. These two firms occupy a class by themselves in respect to the volume and variety of their work and the extent of their influence. In certain respects, Carrère & Hastings have merely confirmed and reinforced the example of McKim, Mead & White. Indeed, both Mr. Carrère and Mr. Hastings performed their earliest practical work in the office of McKim, Mead & White, just as Stanford White himself occupied a stool in the office of Richardson and Charles



RESIDENCE OF DR. CHRISTIAN HERTER (1893).
819 Madison Avenue, New York City.

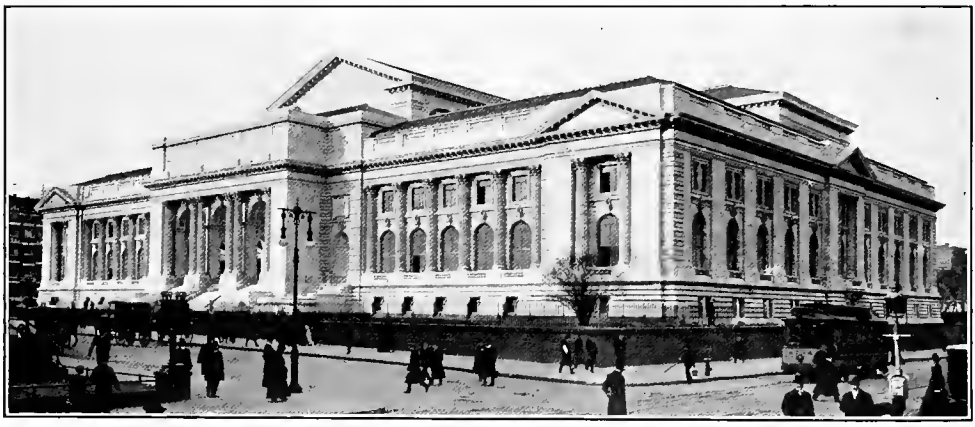
F. McKim in that of Russell Sturgis. At the time, however, when Messrs. Carrère & Hastings were working with the firm of McKim, Mead & White, the later practice and policy of that firm had not been definitely developed. Their employment in McKim, Mead & White's office was coincident partly with the firm's earlier period of gabled and shingled dwellings, and it was not until about the time of the departure of Mr. Carrère and Mr. Hastings that the policy of the firm began to change. From the very beginning of their practice, Carrère & Hastings arrayed themselves on the side of the Renaissance revivalists. They understood, also, that the architectural language of that period was more pre-

RESIDENCE OF H. T. SLOANE (1894).
18 East 68th St., New York City.



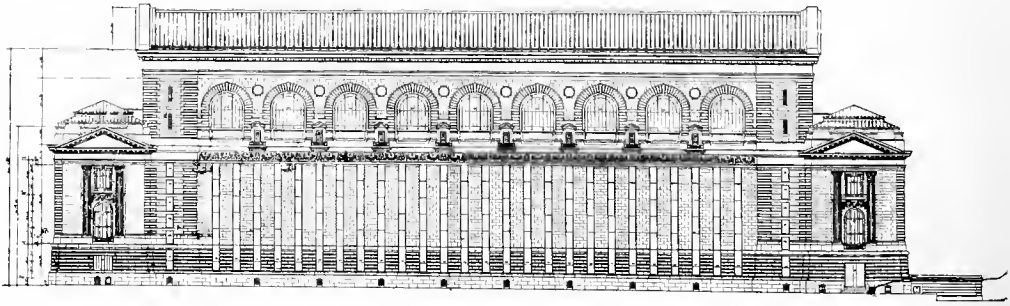
FRONT ELEVATION.

cisely translatable into modern American terms than that of any other period, and they understood that it must become the point of departure for the gradual establishment of a local American tra-

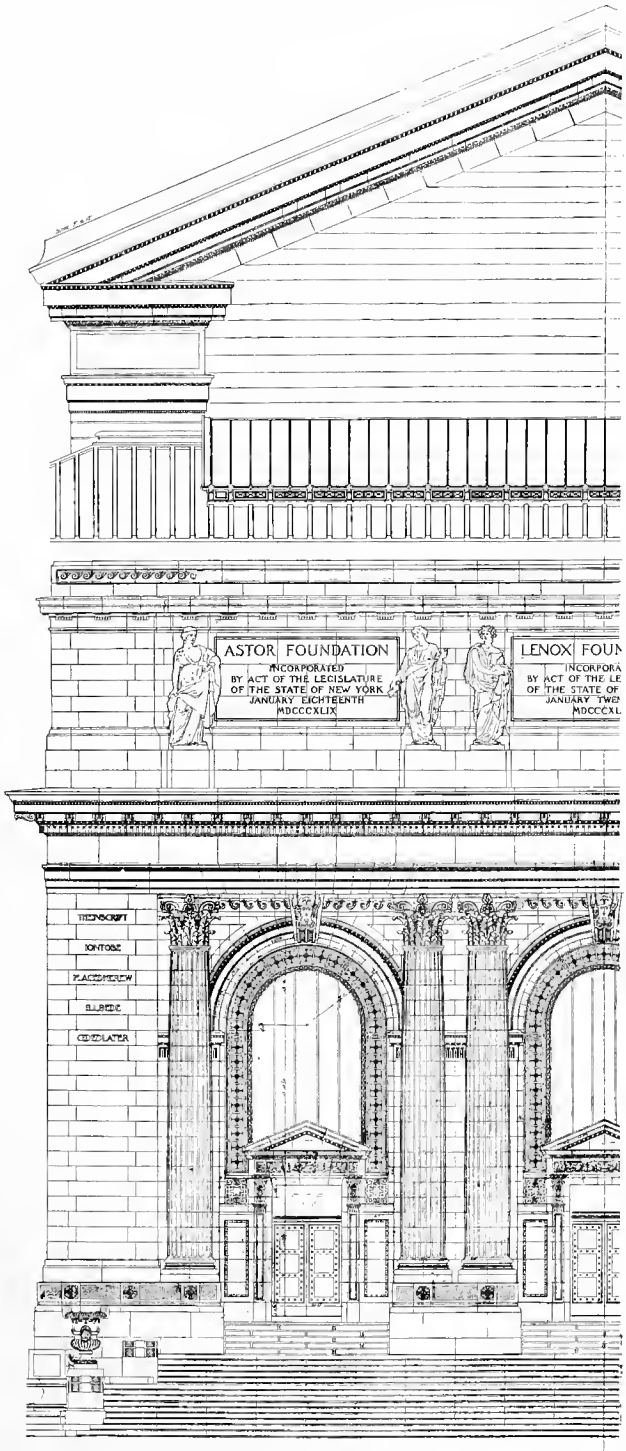


NEW YORK PUBLIC LIBRARY (1897).
Fifth Avenue, 40th to 42d Sts., New York City.

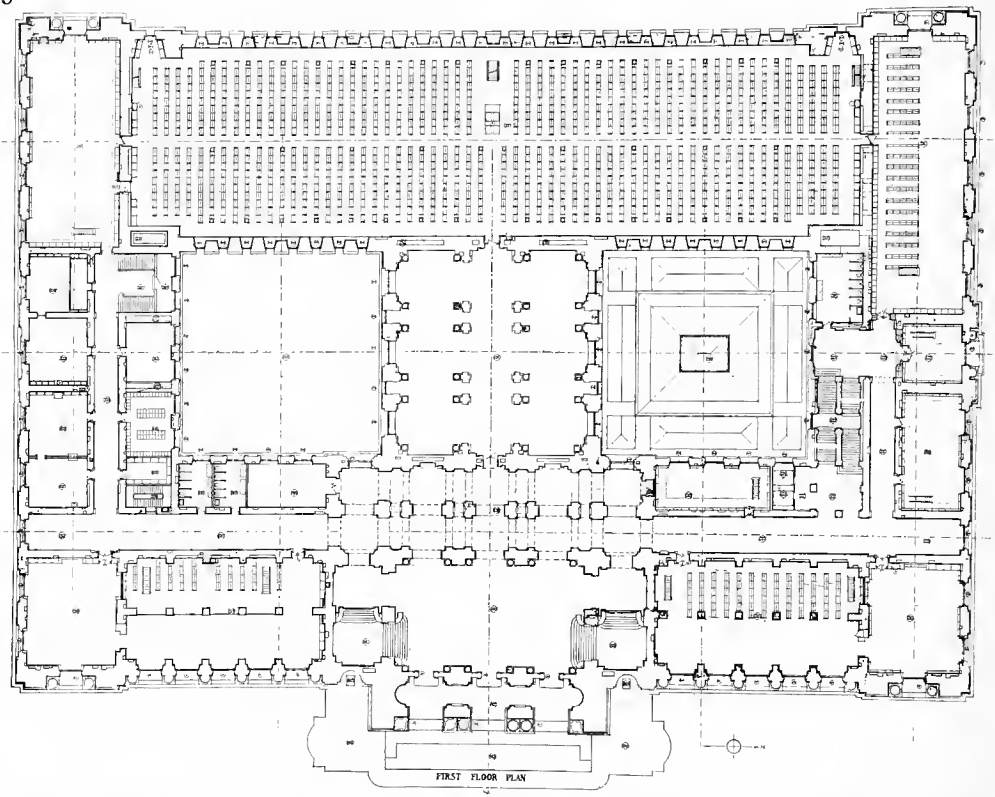
dition. They were not betrayed, consequently, by an illusive pursuit of mere originality. The time may come when American architects can afford to be original; but for the present, originality is necessarily revolutionary; and there is no meaning in a revolution without an established order from which to revolt. Carrère & Hastings joined with McKim, Mead & White in the attempt to establish an order, and they looked in the same direction for the necessary material. They understood that a local

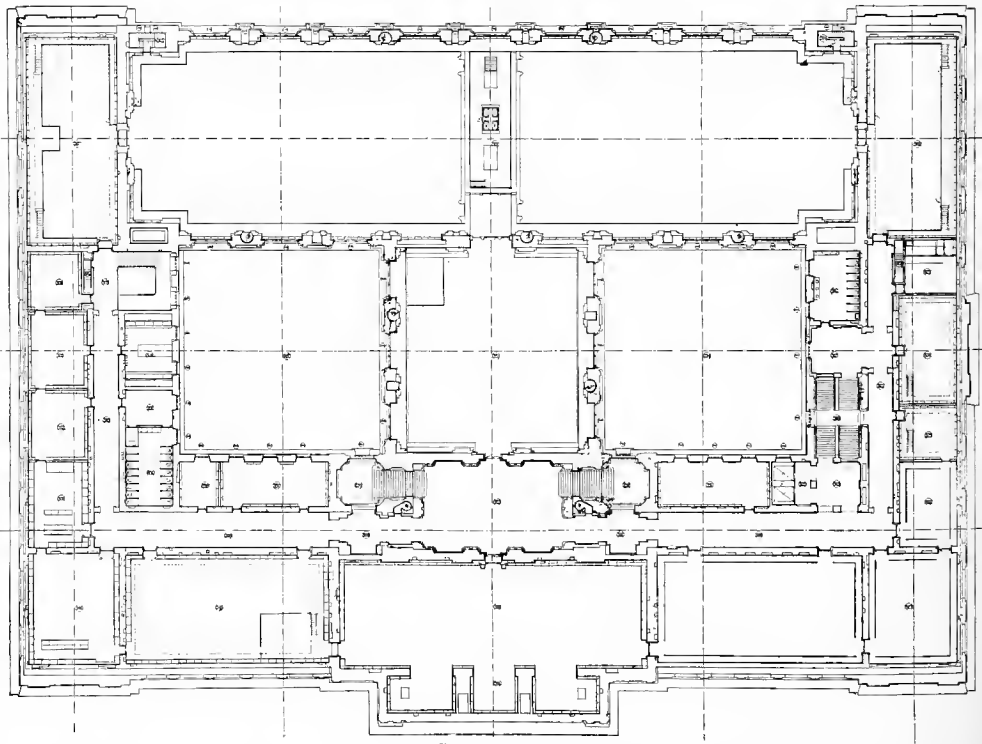


REAR ELEVATION.



NEW YORK PUBLIC LIBRARY—DETAIL OF CENTRAL PAVILION.





Second Floor Plan.
NEW YORK PUBLIC LIBRARY.

American tradition must be founded upon an antecedent European tradition, because acceptable architectural forms must be served up with a garniture of splendid associations and of unimpeachable authority. The notion that Americans can for many generations dispense with such associations and create a group of local realistic forms, based upon the peculiar function and structure of American buildings, can receive no countenance from a study of architectural history. The ideal on which such a notion is based is an æsthetic ideal, which is impossible of application and which, so far as applied, would be sterile in its general results.

Upon the foregoing point the great majority of American architects have always been agreed, but when Carrère & Hastings began to practice there was no similar consensus of opinion as to the nature of the architectural style best adapted to American purposes. Carrère & Hastings share with McKim, Mead & White the credit of having originated and popularized the Renaissance revival. That revival was bound to come, in any event, for reasons which we have already indicated; but the completeness of its triumph and the form which it has assumed were due to the decisive influence of these two firms. If their work had not been intruded into the course of American architecture just when it was, the Renaissance revival in this country might have been submerged under a deluge of modern French architectural forms and fashions, which would have really threatened the prosperity of our American architectural future. The example of these two firms gave, however, an initial dignity and authority to the older Renaissance forms, which proved to be educative to the American public, and which saved this country from becoming an architectural dependency of modern France. Thus their influence was both radical and conservative. It was radical in that it sought to establish a tradition of architectural style, for which there were no authoritative precedents in this country. It was conservative in that it gave that style an expression, based upon its better, more flexible and more dignified phases.

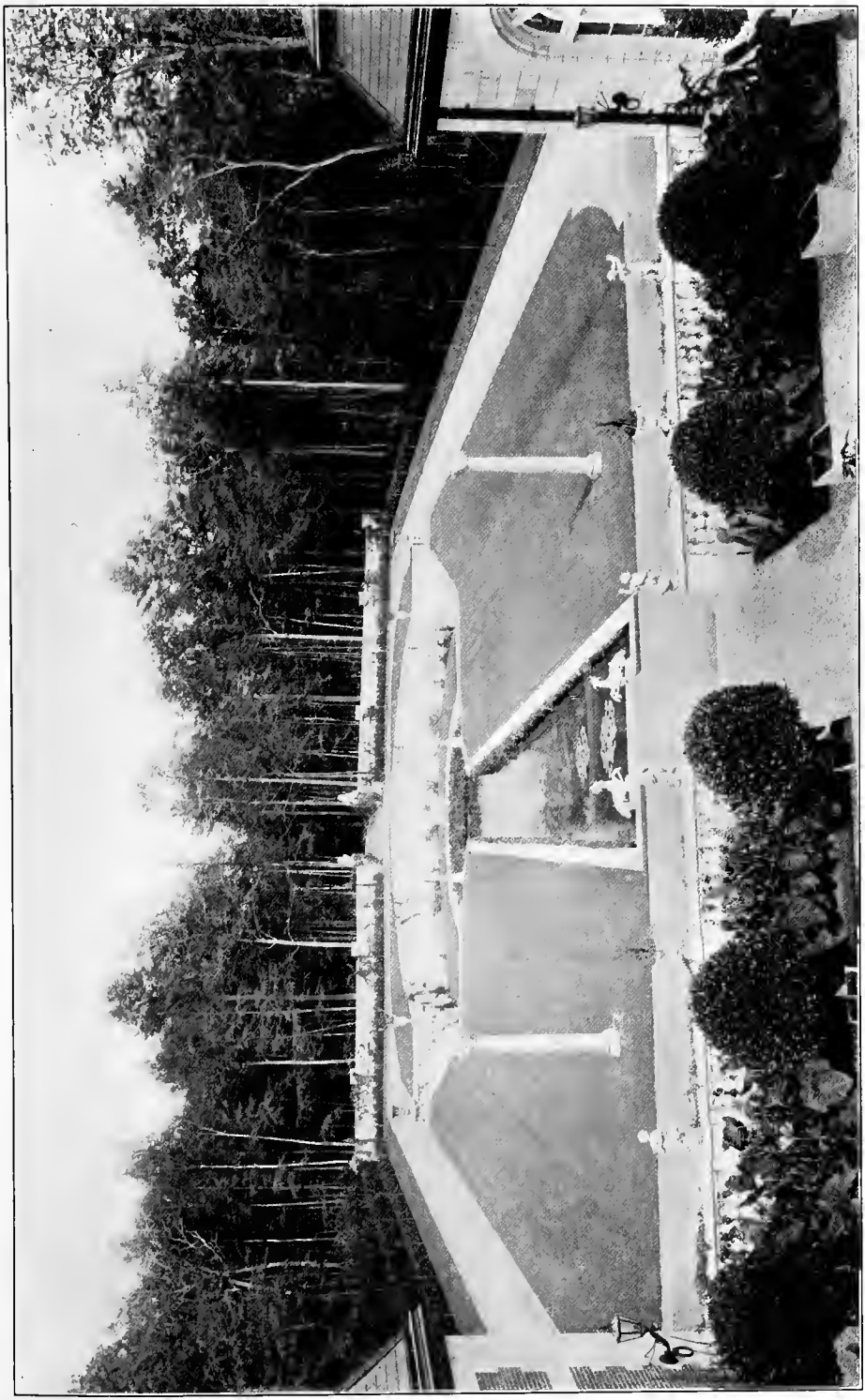
United, however, as McKim, Mead & White and Carrère & Hastings were in their devotion to the better phases of Renaissance architecture, a no less emphatic difference is to be observed in the respective policies of the two firms. Carrère & Hastings almost immediately selected as their own one of the several sub-styles of the Renaissance; whereas, McKim, Mead & White, as we have seen, jumped, much as they pleased, from one to another phase of the Renaissance down to the end of the eighteenth century. Moreover, this selection by Carrère & Hastings was the result not merely of personal preference, although personal preference may have had something to do with their choice. It was founded upon a critical interpretation of modern architectural history. They selected as the style which gave American architects their best opportunity, that of France towards the middle of the eighteenth century; and this style was preferred, because it marks the termination of Renaissance architectural development. Up to that time or a little later, the Renaissance forms had passed through many different phases, some better than others, but all of them based upon an intelligent attempt to give those forms a more consistent expression and to adapt them more completely to novel and contemporary needs. This effort culminated in the domestic architecture of France in the eighteenth century. Thereafter came the Classic and the Gothic revivals, which attempted impossible tasks and which broke the continuity of Renaissance architectural development. They argued that the best course which American architecture could take at the present time would be, consequently, to pick up the thread of Renaissance architectural development at the point where it was dropped towards the end of the eighteenth century, and so to restore the architectural vessel to its true and profitable course.

Such is the theory upon which in general the policy of Carrère & Hastings has been based; and its plausibility

"BELLE FONTAINE," RESIDENCE OF GIRAUD FOSTER, ESQ. (1897).

"BELLE FONTAINE," ENTRANCE LODGE AND GATES.

Lenox, Mass.



COURT AT "BELLE FONTAINE."

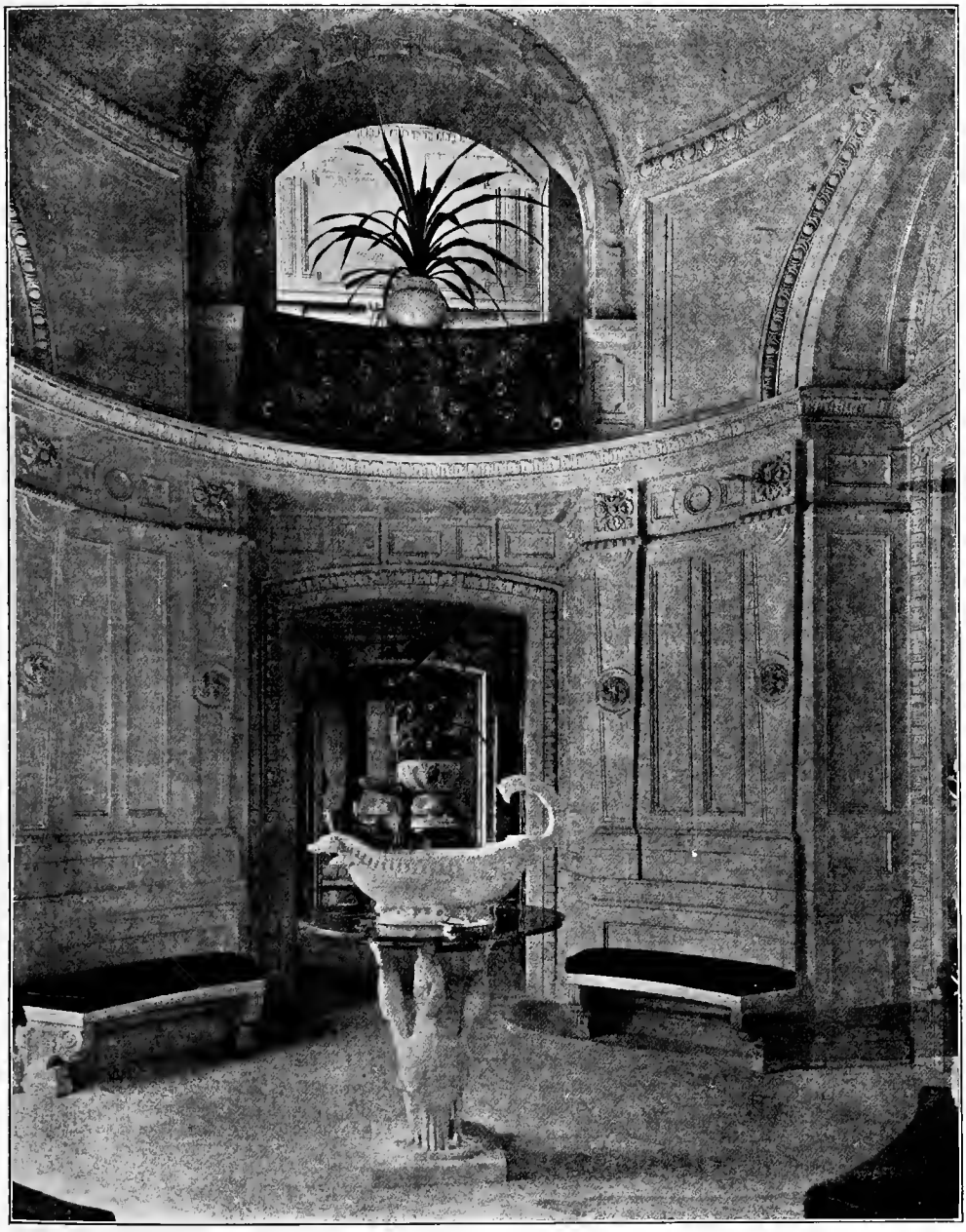
Lenox, Mass.

and persuasiveness must appeal to every disinterested person. The Classic and the Gothic revivals were mistakes which have interfered with the continuity of architectural development, and which diverted much sincere and enthusiastic architectural endeavor to unprofitable courses. It was simply a case of one extreme passing because of its own excesses into another. A frigid but bloated pseudo-classicism tempted its enemies to seek relief in a pseudo-Gothicism, and unless architectural development is to come to an end, this tendency to pass from one extreme to another must be broken. American architects, unless they are content to allow American architecture to remain a sterile battle between a multitude of stylistic sects, must agree to accept the authority of certain specific forms; and a very persuasive argument can be made in favor of the specific forms preferred by Carrère & Hastings. These forms would not be of much help to the American architect in the design of business buildings; but for public buildings of various kinds and for private dwellings, whether situated in the city or the country, they have certain emphatic advantages.

The better French architecture of the eighteenth century was admirable in a number of essential respects. During the seventeenth century French architects had dispensed with the anachronisms and the rudimentary survivals characteristic of the early Renaissance châteaux. They had made their domestic buildings a consistent and dignified expression of contemporary needs; but they had also made them so grandiose that they became tiresome places in which to live. During the eighteenth century mere grandeur gave place to a much more charming, an intimate kind of house, which succeeded in keeping the distinc-

RESIDENCE OF GIRAUD FOSTER, ESQ., STAIRHALL.

Lenox, Mass.



RESIDENCE OF GIRAUD FOSTER, ESQ.—VESTIBULE.

Lenox, Mass.

tion and dignity of the older châteaux while doing away with its tendency to pretentious dullness. At the same time, the French architects were seeking for the first time to work out a satisfactory style of urban architecture which should take the block, rather than the individual house as the unit of the design; and in this attempt they were extraordinarily successful. Paris, in the case of the Place Vendôme, contains assuredly the most consistent, the most beautiful, the most appropriate and the most charming design for a small square of any city in the world. It may be emphatically asserted, consequently, that American architects could not select any one Renaissance sub-style better adapted to their needs than that of eighteenth century French. It contains in a peculiar degree the combination of being both modern and traditional, and of being both charming and dignified. It is fresh without being flippant or trivial; and it is conventional without being lifeless and dull. Its manners, that is, are perfect; and good manners are, of course, precisely the great need of American architecture. Carrère & Hastings have been as successful in giving a modern American version of these good French architectural manners of the eighteenth century as McKim, Mead & White have been in sympathetically interpreting some of the earlier phases of Renaissance architecture.

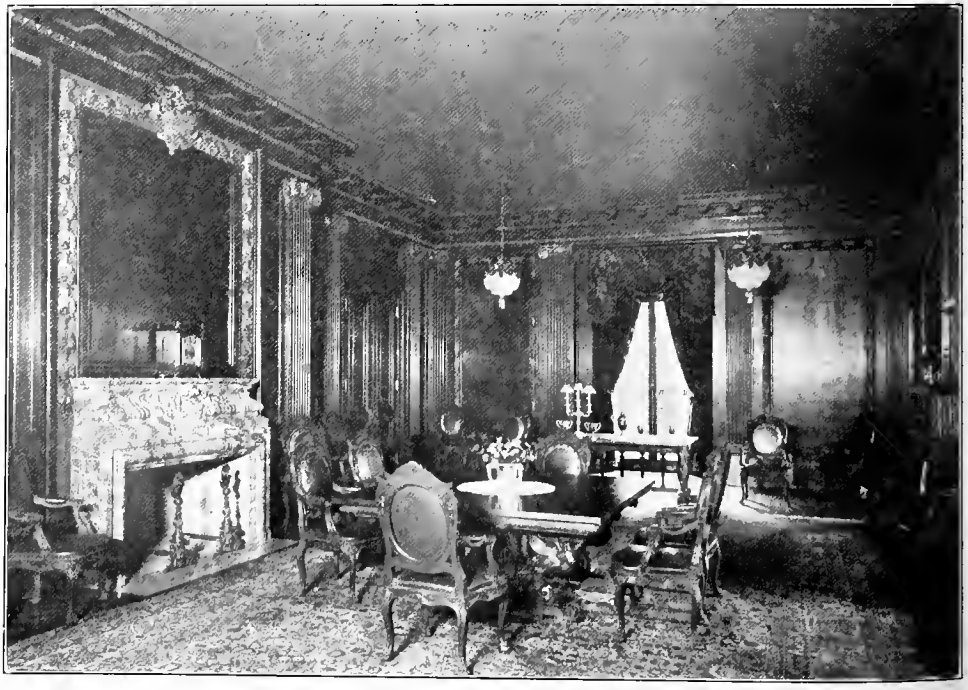
What, however, is likely to be the judgment of the future upon their variation in policy from that of McKim, Mead & White? Were they right in selecting their own architectural models from one particular phase of Renaissance design? And can their own special choice of French eighteenth century be justified? Are there any good reasons to suppose that American architecture should or will submit to the authoritative guidance of this particular Renaissance sub-style?

It is too soon to assert dogmatically that Carrère & Hastings were or were not right in their policy, and in the reasons whereon it was founded. But while a final answer to these questions must be reserved for the future, one may make a guess from the practice of the younger American architects as to the answers which these questions will eventually receive. Our own guess would be that Carrère & Hastings were wrong in certain respects and right in others. They were right in claiming that each individual architect should narrow the area of his choice to one specific Renaissance sub-style, because the ordinary and frequently even the exceptional designer is likely, under such a condition, to do more consistently good work. The several phases of Renaissance architecture are united by both historical and logical bonds; but they are separated by many essential differences of function, of social background and of purely contemporary needs. How different the whole artistic and social atmosphere of the Villa D'Este and Palladio's Villa of Capra. What a long road must be traveled in making the transition between either of them and the Château of Vaux-le-Vicomte? Are there not more differences than similarities between the assured distinction of the Petit Trianon and the timid correctness of the Georgian mansion of some English merchant? Most certainly these differences can be and have been bridged; but they are bridged more by flashes of sympathetic insight than by settled habits of architectural thought. The man who bridges them successfully is most likely to do so while under the fascination of some particular building; and the attempt to adapt particular buildings to novel surroundings is dangerous for any but the ablest and most conscientious architectural designers. The best course for the majority of architects is to accept the authority of some narrower convention and to train themselves to think clearly and fruitfully in those particular terms. Only on some such condition is he likely to obtain a complete mastery of his architectural language. Only by repeated experiments in the use of such a language can he acquire the sort of control of it which would have been instinctive with its originators; and, as a matter of fact, the example of Carrère & Hastings has been the one which the

RESIDENCE OF WALTER JENNINGS, ESQ.

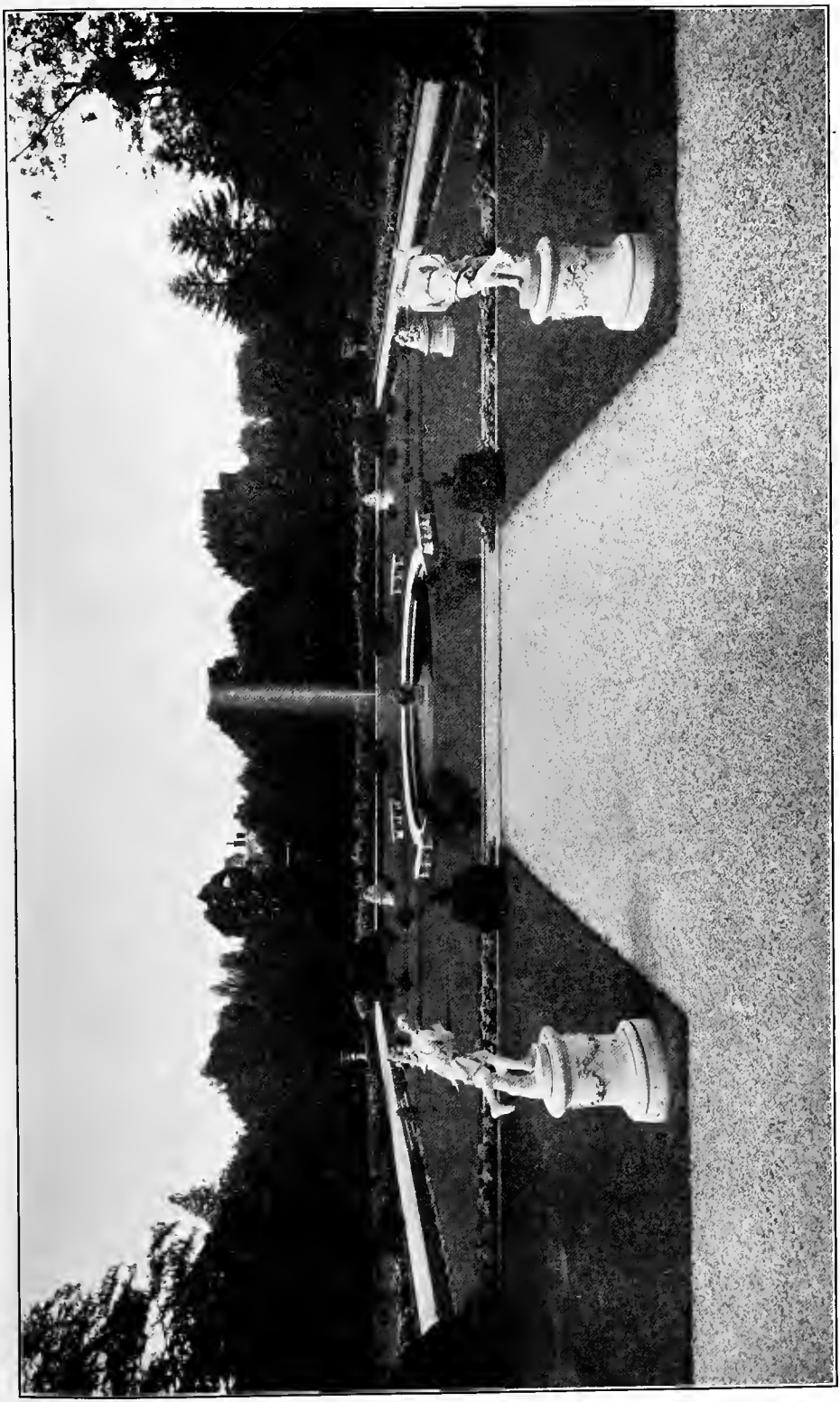
RESIDENCE OF WALTER JENNINGS, ESQ. (1897).
Cold Spring Harbor, L. I.

RESIDENCE OF MRS. RICHARD GAMBRILL (1898).



RESIDENCE OF MRS. RICHARD GAMBRILL—LIVING ROOM.

Newport, R. I.



RESIDENCE OF MRS. RICHARD GAMBRILL—FORMAL GARDEN.

Newport, R. I.

majority of their younger contemporaries have followed. The better among the younger American architects are usually faithful in their adopted forms to one particular Renaissance or modern French style.

On the other hand, they have not all been faithful to the same particular style; and it is too much to expect that they will be. No doubt American architecture would advance much more rapidly in case the great majority of American architects would accept the authority of one specific style, because in that case their individual experiments would be mutually corroborative and stimulating; and variations, when they intruded, would have to be justified by their real meaning and importance. But this is a counsel of perfection. Americans have a deeply rooted habit of associating individuality with arbitrary personal preferences; and particularly in their relations with the builders of private houses, architects have to consult personal preferences in the matter of style other than their own. For the present, American architects will do as much as can be expected of them, in case they will only remain true to the Renaissance, and not allow an intelligent eclecticism to become equivalent to hopeless confusion and anarchy. For the present the platform of the Renaissance should be broad enough to include the largest and best part of American architectural practice, while, at the same time, narrow enough to shut out meaningless and sterile Protestantism.

RESIDENCE OF MRS. RICHARD GAMBRILL—LOGGIA.
Newport, R. I.

It may be suggested, consequently, that Carrère & Hastings were wholly justified in selecting French eigh-

RESIDENCE OF MRS. RICHARD GAMBRILL—ENTRANCE HALL.

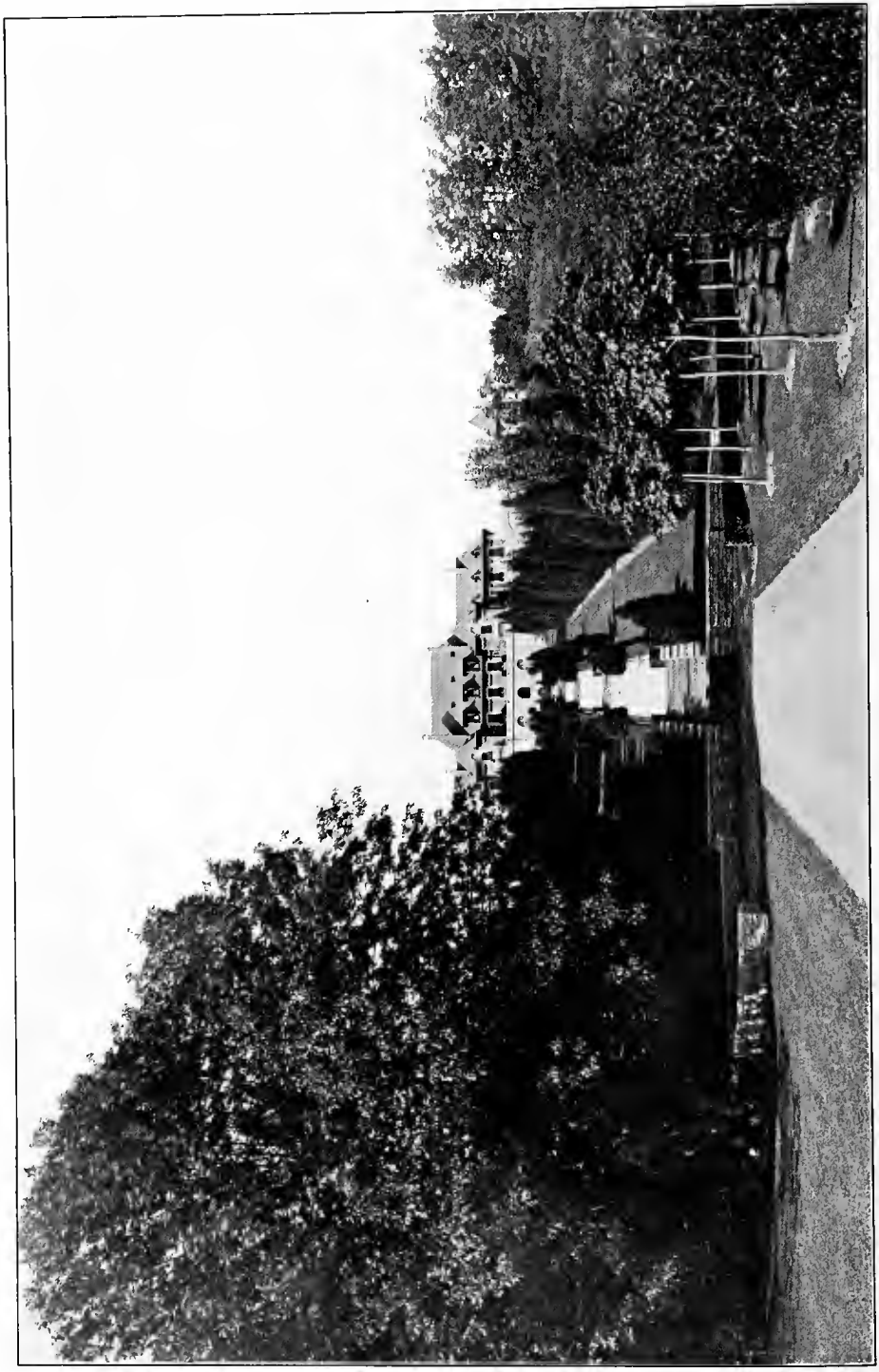
teenth century as the point of departure of their own work, but that they could hardly expect the reasons for their choice to have any sufficient authority for other American architects. They are, of course, historically correct in their assertion that Renaissance architecture ceased to develop after 1775; and the idea of seeking to pick up the lost thread has a certain attractive plausibility. Yet when the matter is closely considered, one begins to doubt whether a thread which has been dropped can be picked up at will, particularly by an alien people, living under very different social and economic conditions. How-

ALTERATION TO HOUSE OF L. S. THOMPSON (1898).

Red Bank, N. J.

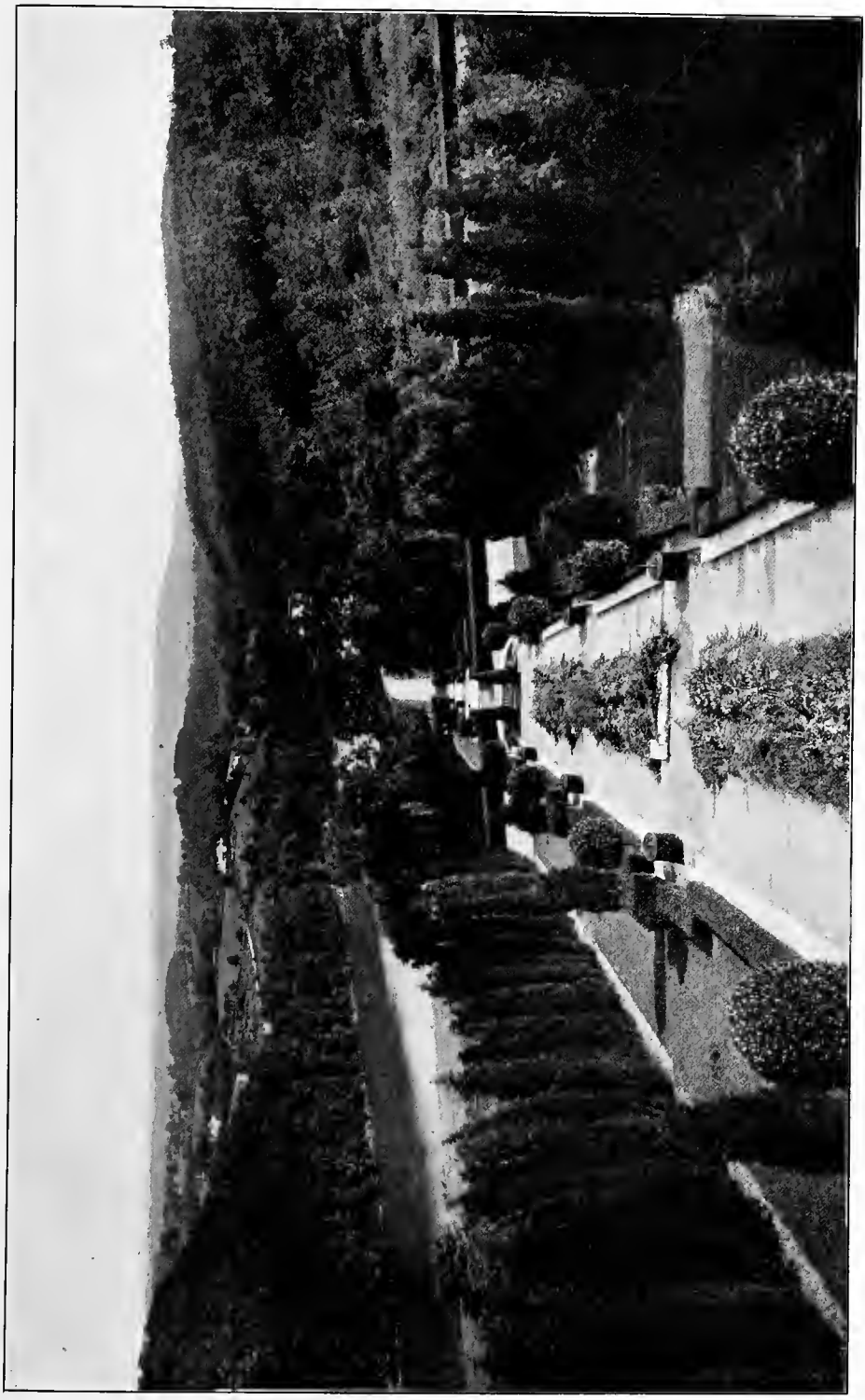
FIRST CHURCH OF CHRIST SCIENTIST (1898).
96th St. and Central Park West, New York City.

FIRST CHURCH OF CHRIST SCIENTIST—AUDITORIUM.—96TH ST. AND CENTRAL PARK WEST, NEW YORK CITY.



"BLAIRSDEN," RESIDENCE OF C. LEDYARD BLAIR, ESQ. (1898).—HOUSE AND APPROACH.

Peapack, N. J.



APPROACH TO "BLAIRSDEN," RESIDENCE OF C. LEDYARD BLAIR.

Peapack, N. J.

ever much he might like to, an American architect cannot forget all that happened between 1780 and 1880; and whether he likes it or not, he is, as a matter of fact, very much the creature of all those years of wandering in an architectural wilderness. The actual historical thread has disappeared somewhere in the thicket; and even if it could be found, the attempt to resume the interrupted continuity of architectural development is likely to prove futtile. Ideals and conditions are too different. The modern world is bound up indissolubly with the world of the Renaissance; but the ties are and must remain general and vague rather than specific and continuous along any one line.

The situation which in general confronts the American architectural profession may then be described as follows. Its practitioners should agree, for the most part, to continue the work of establishing an authoritative convention of Renaissance architectural forms in this country, because by so doing they are putting a fruitful limitation upon the range of their individual architectural experimentation, and because Americans are, whether they realize it or not, children of the Renaissance intellectual revival. But in accepting the Renaissance as the source of their architectural forms, they are, as a whole, under no similar obligation to accept any one phase of the Renaissance. Individual architects will most assuredly do very much better to limit their choice to some particular sub-style; but there appears to be no unimpeachable reason why they should all limit their choice to the same sub-style. It is the Renaissance as a general movement to which they owe their allegiance; and the Renaissance as a general movement is in its architectural expression more a matter of a certain spirit and point of view than it is of specific forms. The Renaissance was itself a revival of Roman architecture; and Roman architecture had borrowed much from the architecture of Greece. Allegiance to the Renaissance means, consequently, more than anything a perpetuation of the spirit resident in Classic architecture—the spirit of repose, of measure without any sacrifice of vivacity, of simplification without attenuation, of style which leaves room for individuality. An architect who can attain to something of this Classic spirit will possess the touchstone, enabling him to give a beautiful and appropriate rendering to any particular set of Renaissance forms best suited to his temperament and purpose. It is just because the Renaissance constitutes our means of historical connection with the Classic ideal that it exercises a peculiar authority over every phase of modern architecture and intellectual life. The Greeks should be our masters in all matters of form; and the artist who attempted to infuse this Classic spirit into the later forms, which he happens to prefer, is merely comparable to the clergyman who seeks to make the dogmas and the ritual of his sect the vehicle of the spirit resident in the Gospels. Neither of them is attempting to impose certain rigid and antiquated forms upon the complex of modern life (as did the Classic revivalists); but both are merely trying to keep a process of imitative reproduction fresh and fruitful by an imaginative re-capture of the spirit of the original.

While it can scarcely be admitted that the forms of French eighteenth century architecture should possess for Americans any exclusive authority, there can be no doubt that Carrère & Hastings, in basing their work upon these particular forms, made a most intelligent and fortunate selection. The reasons which can be urged in favor of this Renaissance sub-style have a great deal of force. Its establishment on American soil was particularly desirable, not because American architects could thereby pick up the lost thread of Renaissance architectural development, but because American architecture was much in need of the qualities and characteristics of the better buildings of France in the eighteenth century. These buildings were, as we have said, a consummate expression of good architectural manners. While they did not have the sub-

"BLAIRSDEN," THE HOUSE.

stance and the breadth of some of the earlier examples of Renaissance architecture born in Italy and in France, neither did they tend to have that palatial character which frequently makes it difficult to adapt the architecture of the earlier and even of the middle Renaissance to modern American conditions. In dimensions and in general proportions, they were admirably suited to a gentleman's residence; and they possessed the distinction, the attention to

"BLAIRSDEN," THE STABLES.

Peapack, N. J.

"BLAIRSDEN," A VISTA TO THE HOUSE.

"BLAIRSDEN," CORNER OF GARDEN AND PERGOLA.

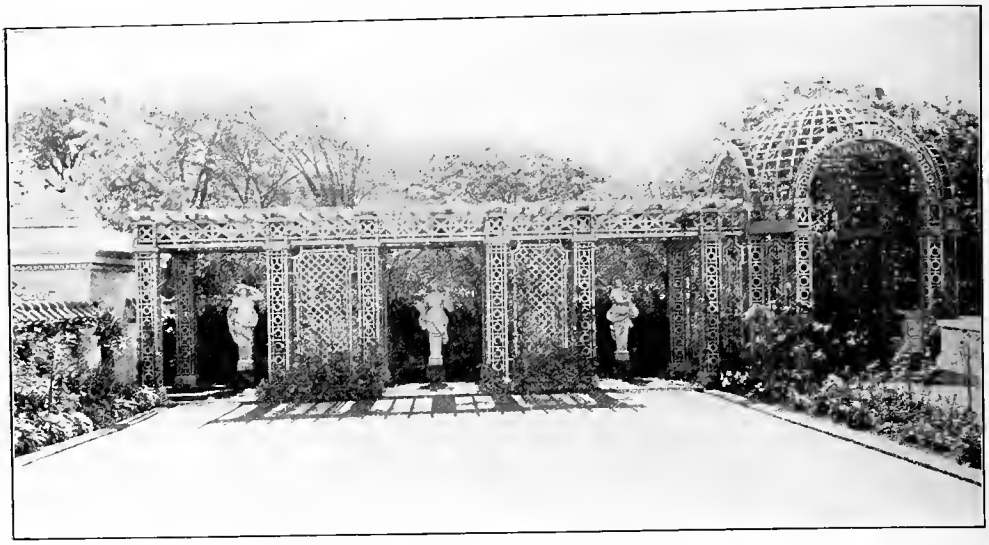
Peapack, N. J.

HUDSON PARK (1898).

New York City.

PAN-AMERICAN EXPOSITION—DETAIL OF PERISTYLE.

Buffalo, N. Y.



A DETAIL OF MRS. GAMBRILL'S GARDEN.

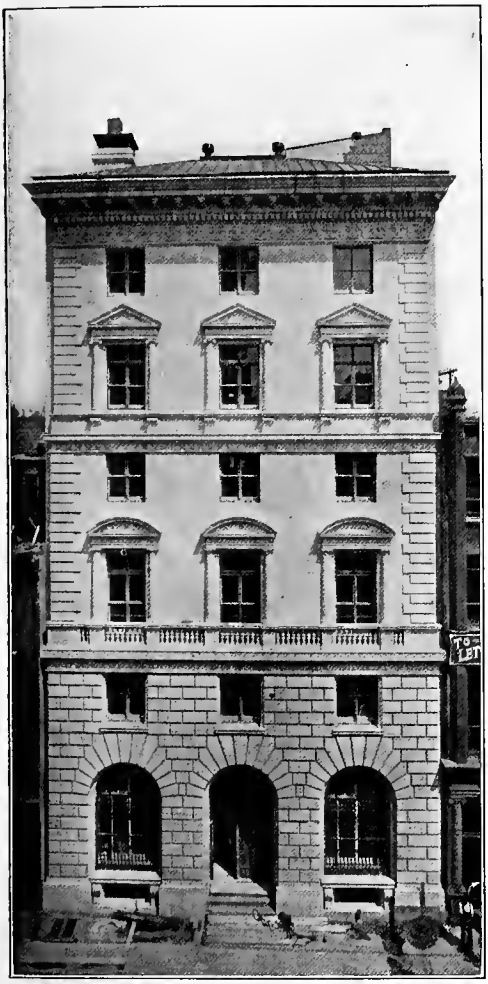
Newport, R. I.

detail, the refinement of taste, the self-possession and the quiet assurance of bearing, characteristic of the gentleman's demeanor. They were not without a certain kind of affectation, but their mannerisms were never trivial or vulgar; and they can be dropped without dropping anything essential to the style itself.

At the time when Carrère & Hastings began to practice, American domestic architecture was very much in need of the qualities of distinction and refinement. The average rich business man

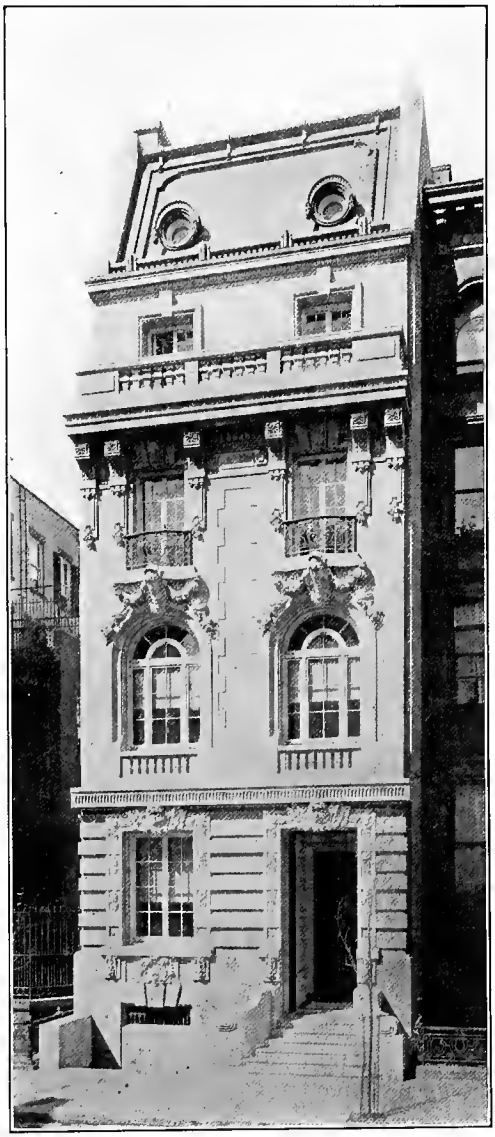
MURRY GUGGENHEIM GARDEN.

Elberon, N. J.



Royal Bank of Canada (1906.)
Toronto, Canada.

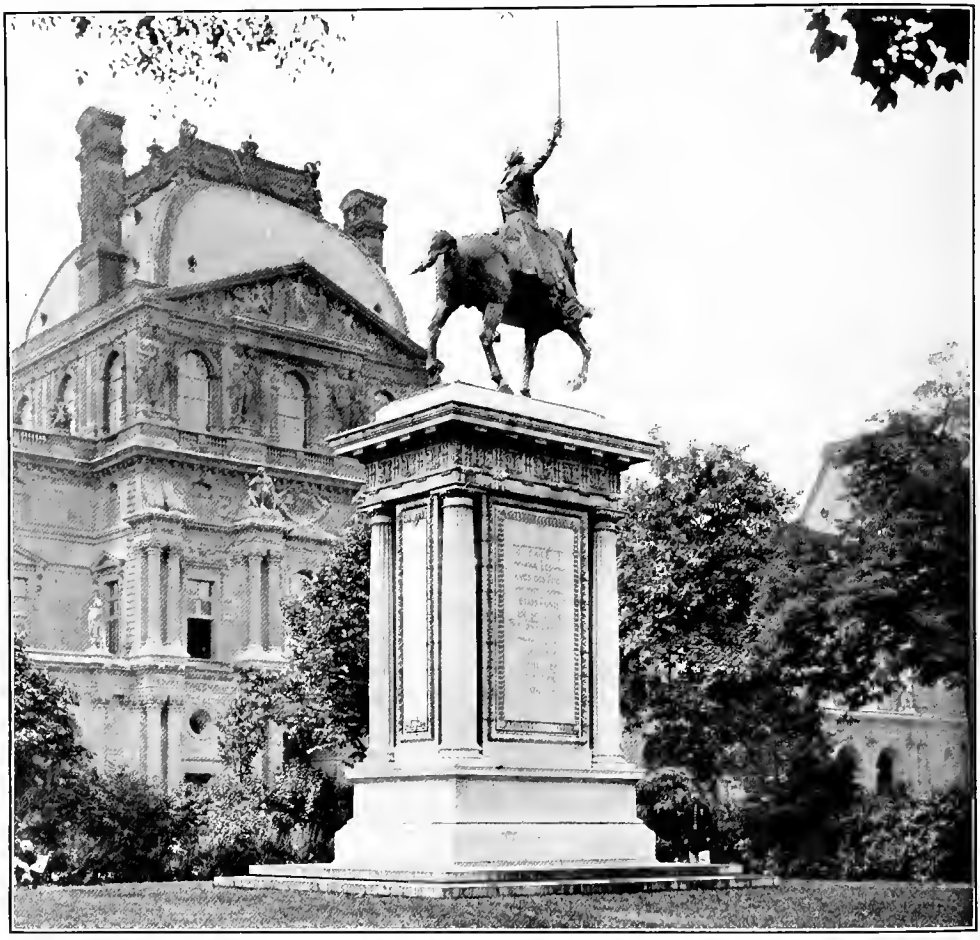
of that day, who built a country house, took his choice between an overgrown cottage and second-rate palace, neither of which was really what he wanted and needed. He wanted and needed something better than a swollen cottage, because, for the benefit of his taste and the satisfaction of his imagination, he ought to live in a house designed and planned in relation to some admirable and well-developed historical style. But, on the other hand, to jump from a big cottage into a palatial villa was merely to substitute inappropriate vulgarity for a species of sprawling informality. The sort of dwelling such men needed was impersonal, because domestic establishments of a certain scale and complexity must be formed out of many elements, put together with propriety, technical knowledge and architectural effect. Yet it must not be planned on too grand a scale, because in that case it falsifies the lives of its inhabitants. Carrère & Hastings have, throughout their career, held with particular success a proper balance



Residence of Dr. E. K. Dunham (1898).
35 East 68th St., New York City.

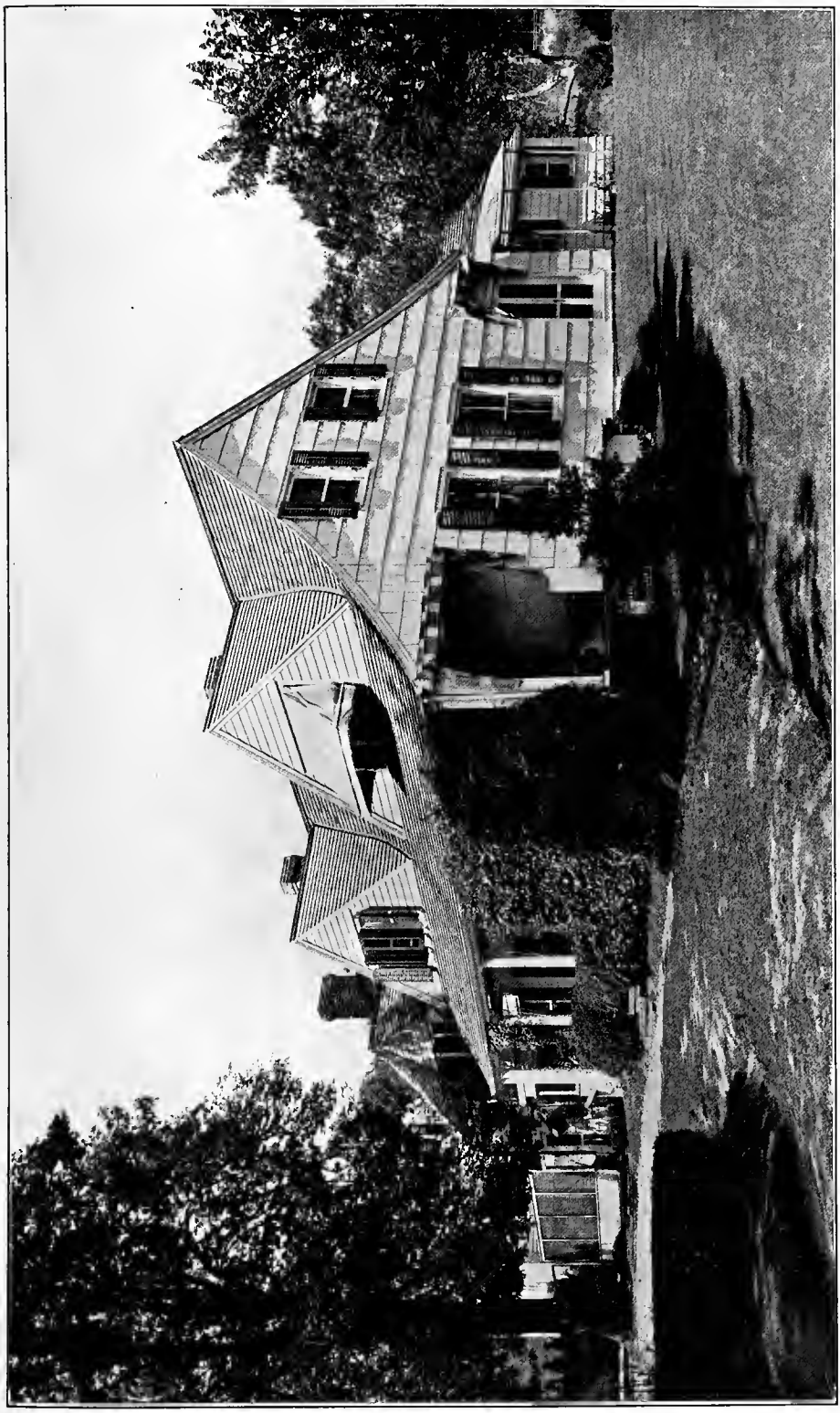
between the two dangerous extremes. They have designed and planned for their clients houses that have distinction and style, without being pretentious or grandiose; and they have been able to achieve their conspicuous success at least partly because they have remained loyal to the spirit of the domestic architecture of the eighteenth century of France. In our opinion, the series of country dwellings which they have built during the past twenty-five, and particularly during the past fifteen years, constitute their most conspicuous success and give them a special standing among their professional associates. In this respect they have made a unique contribution to the wholesome development of American domestic architecture.

These houses constitute a peculiarly successful application to American conditions of the whole group of technical values resident in the eighteenth century French country dwellings. In the first place, the buildings are planned and designed, if not in subordination to a comprehensive, landscape scheme, at least in careful relation thereto; and this in itself was a great step in advance for Carrère & Hastings to take. They were among the first of American architects to insist upon the essential import-



LAFAYETTE MONUMENT (1899).

Place du Caroussel, Paris.



HOUSE OF MR. THOMAS HASTINGS—ALTERATION (1908).

Port Washington, L. I.

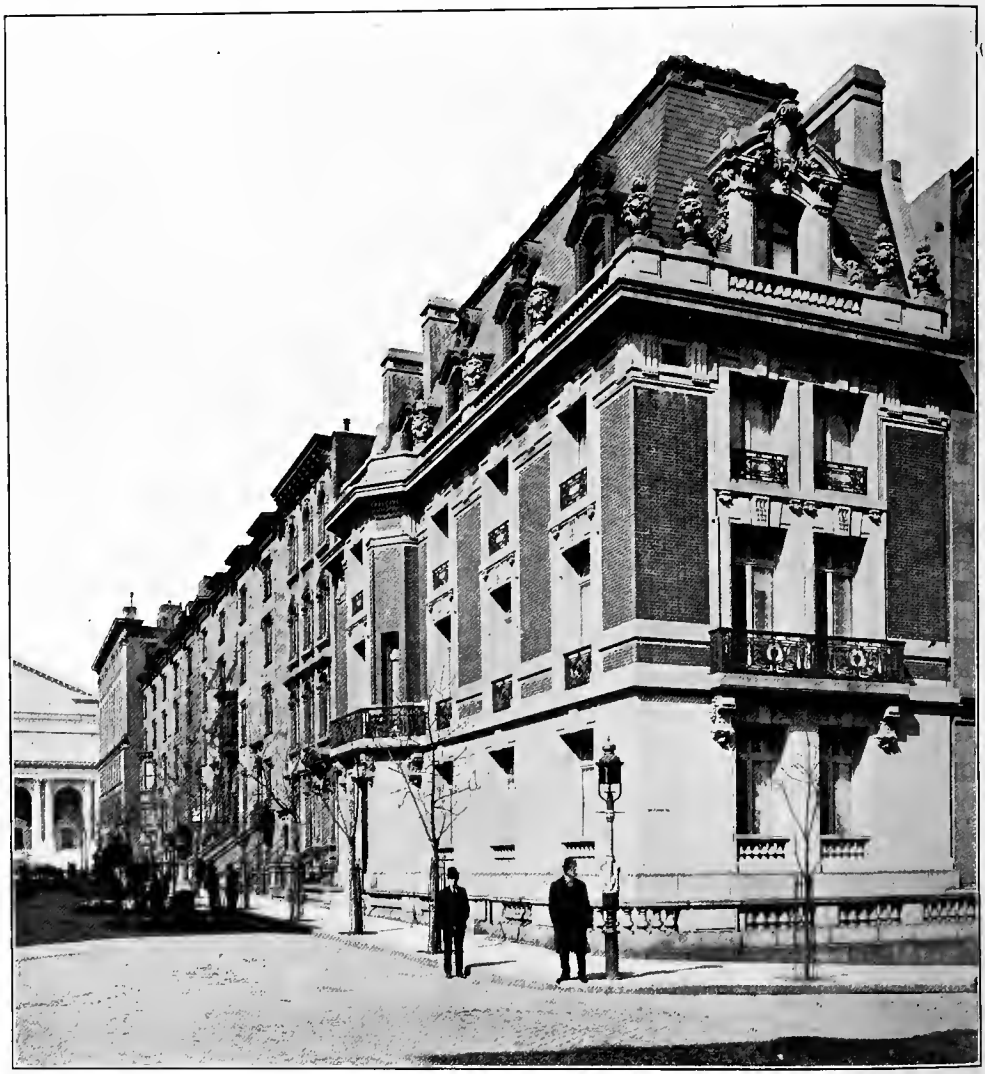
RESIDENCE OF HON. ELIHU ROOT (1896).
Southampton, L. I.

ONE OF THE GROUP OF HOUSES FOR GEO. W. VANDERBILT, ESQ. (1900).
Clifton, S. I.

GROUP OF HOUSES FOR GEORGE W. VANDERBILT, ESQ. (1900).

Clifton, S. I.

ance of a landscape layout, harmonizing with the plan and design of the house; and the most superficial examination of the illustration of their country places will disclose a certain unity of architectural conception pervading the whole scheme. Their gardens never appear to be as, in the case of so many American country places, an irrelevance or an after-thought. They belong to the house or to the layout of which the house is a part. Indeed, if one were to make any criticism at all, one would say that perhaps they belong too much to the house. They are out-of-door rooms, in which the occupant does not get a sufficient sense of being out-of-doors, and which have the air too much of an open-air *salon*.

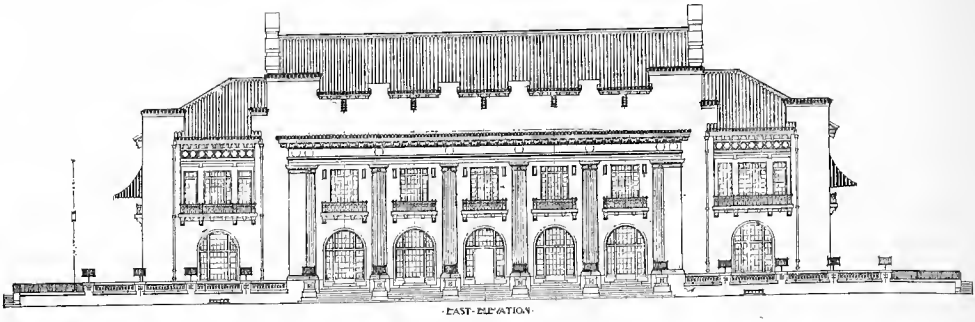


RESIDENCE OF CHAS. N. SENFF, ESQ. (1900).
41st St. and Madison Ave., New York City.

In this respect, however, Carrère & Hastings have merely been faithful to the method and spirit of their models.

"WHITE HALL," RESIDENCE OF HENRY M. FLAGLER, ESQ.

"WHITE HALL," RESIDENCE OF HENRY M. FLAGLER, ESQ. (1901).
Palm Beach, Fla.



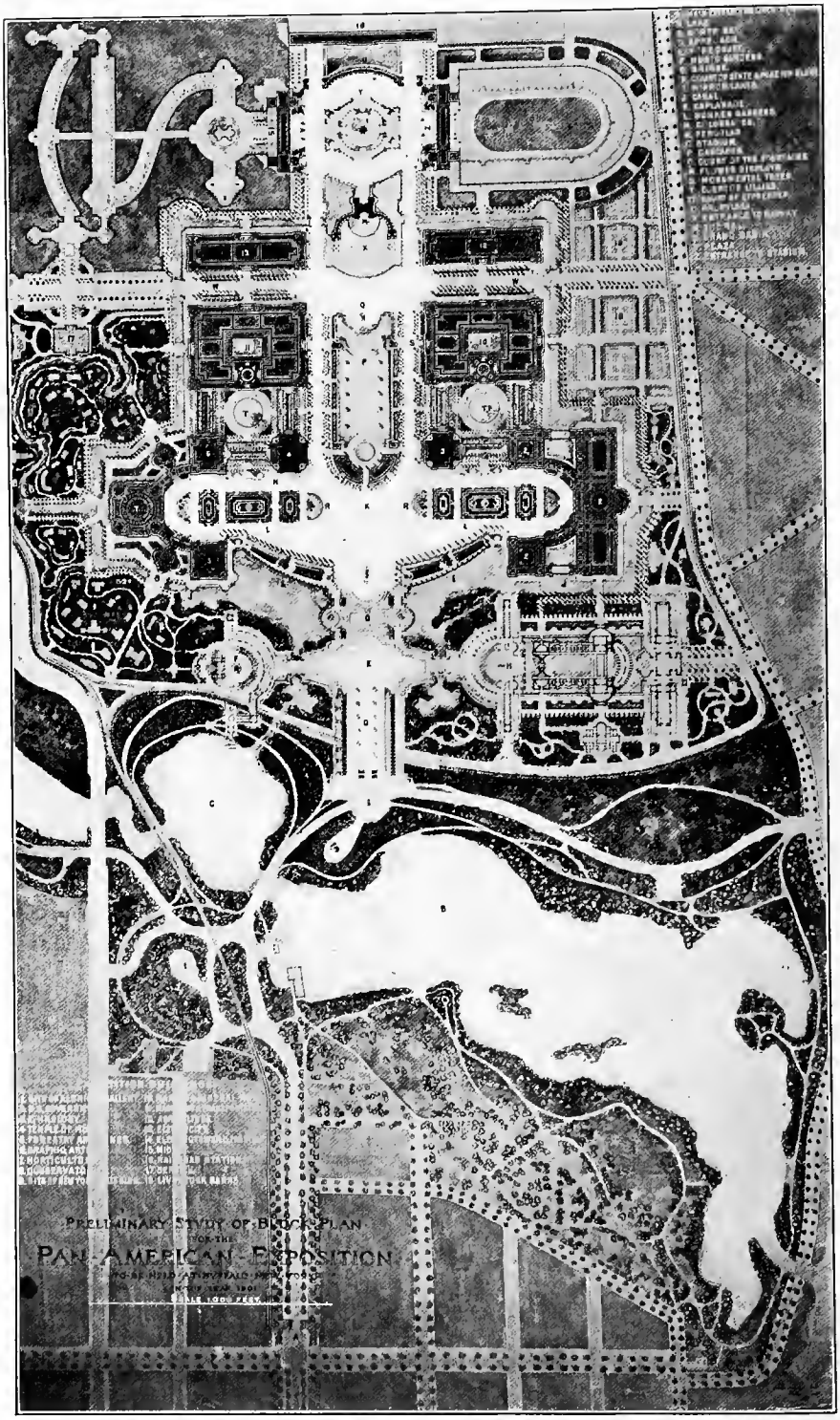
"WHITE HALL," RESIDENCE OF HENRY M. FLAGLER, ESQ.—FRONT ELEVATION.

The French eighteenth century garden was a place for polite conversation and for social intercourse, rather than a place in which to enjoy nature; and it was inevitable that in planning such an apartment purely natural effects should be kept in the background. But this criticism should not be pushed too far. The smaller French garden, laid out in intimate relation to the house, is not only a great convenience, but is an enormous help to a host in entertaining his guests. It may have a tendency to over-artificiality; but such a tendency is quite compatible with most charming effects and results. And in this, as in other respects, Carrère & Hastings have been faithful to their models. Their places have a kind of charm, as well as a kind of convenience, for which one seeks vainly in more "natural" gardens —a charm which is the result not merely

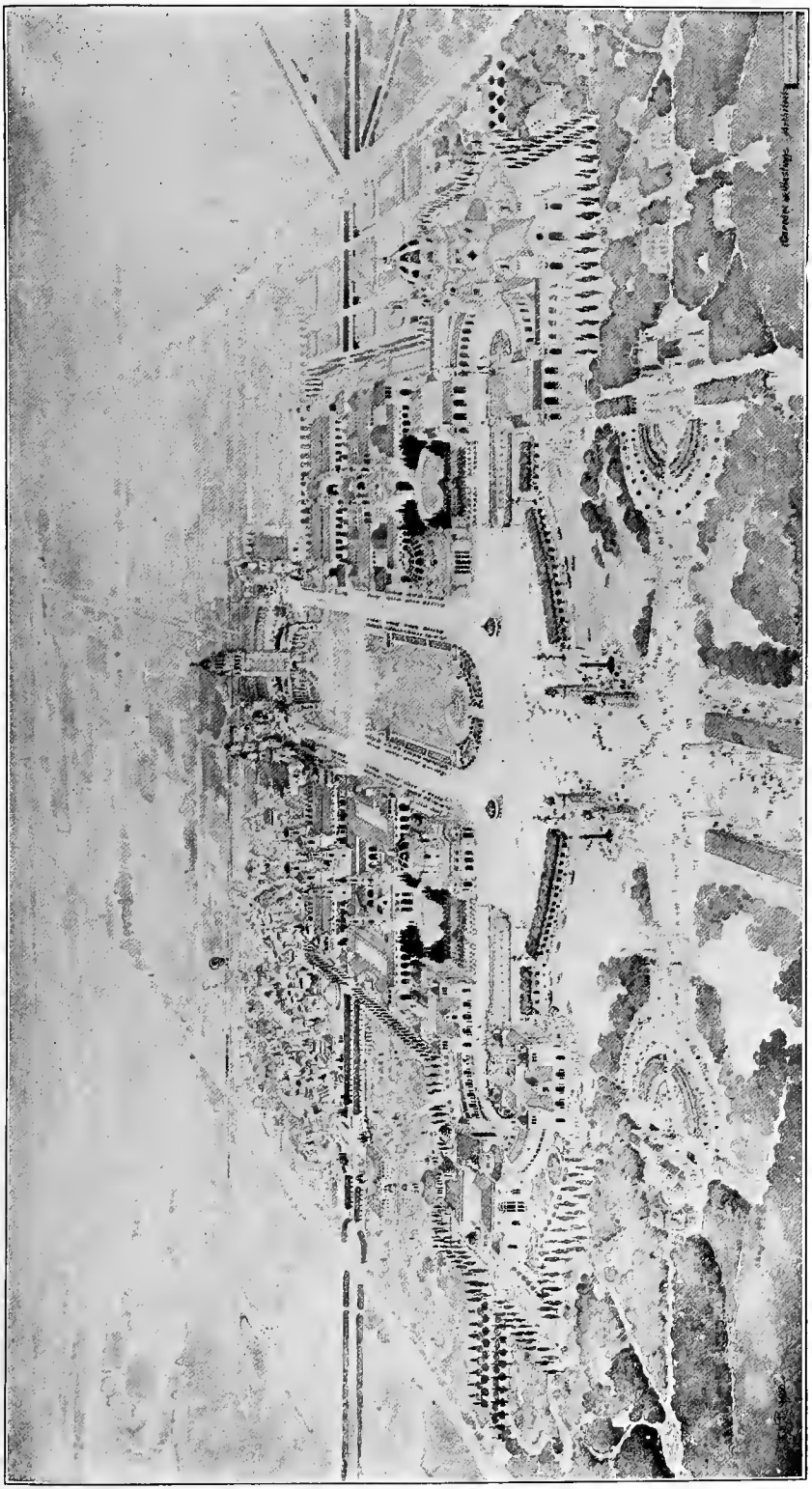
"WHITE HALL," RESIDENCE OF HENRY M. FLAGLER, ESQ.—INNER COURT.
Palm Beach, Fla.

PAN-AMERICAN EXPOSITION (1901)—ENTRANCE PYLONS.

Buffalo, N. Y.



PAN-AMERICAN EXPOSITION—BLOCK PLAN.



PAN-AMERICAN EXPOSITION—BIRD'S-EYE VIEW.

of taste in the arrangement of details, but which depends largely upon its practical convenience and on the artificial intimacy between the house and grounds.

In the praise of the best of their houses, one can scarcely be too enthusiastic. From our American point of view, the least natural aspect of their country houses is their exquisite good form. They have succeeded in rendering admirably the mixture of dignity, distinction, courtesy and gayety characteristic of the better French eighteenth century house and manners; and for this they deserve the gratitude of everyone who recognizes the profound similitude between domestic architecture and domestic habits of behavior. Houses such as these should, of necessity, be an instruction in good form to their inhabitants. The peculiar merits of the eighteenth century French house are reproduced with spirit and with effect, while, at the same time, there is never a suggestion of monotony or of literal copying. Both plans and designs exhibit the utmost variety in details, as well as in essentials. It is evident that the architects have obtained a thorough mastery of their vehicle, and can adapt without any awkwardness their favorite forms to the needs of a particular location or a particular client. Superficially, for instance, there are profound differences between the Gambrill house in

THE PAN-AMERICAN EXPOSITION—THE COURT OF HONOR LOOKING TOWARDS THE ELECTRIC TOWER.

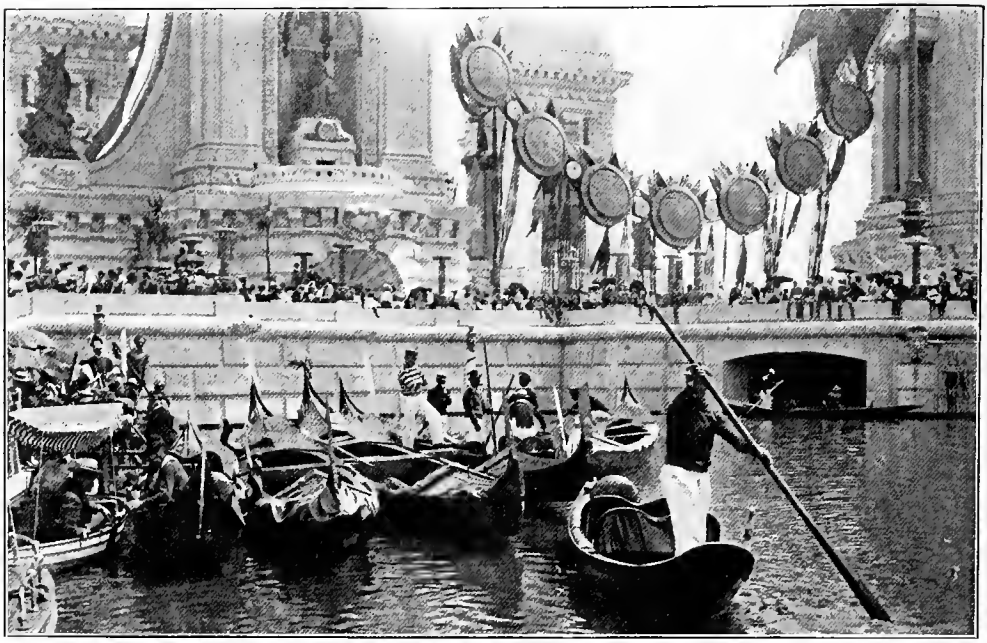
Electric Tower—John Galen Howard, Architect.
Buildings on Sides by various architects.
Setting and Detail by Carrère & Hastings.

The Entrance Pylons Illuminated.

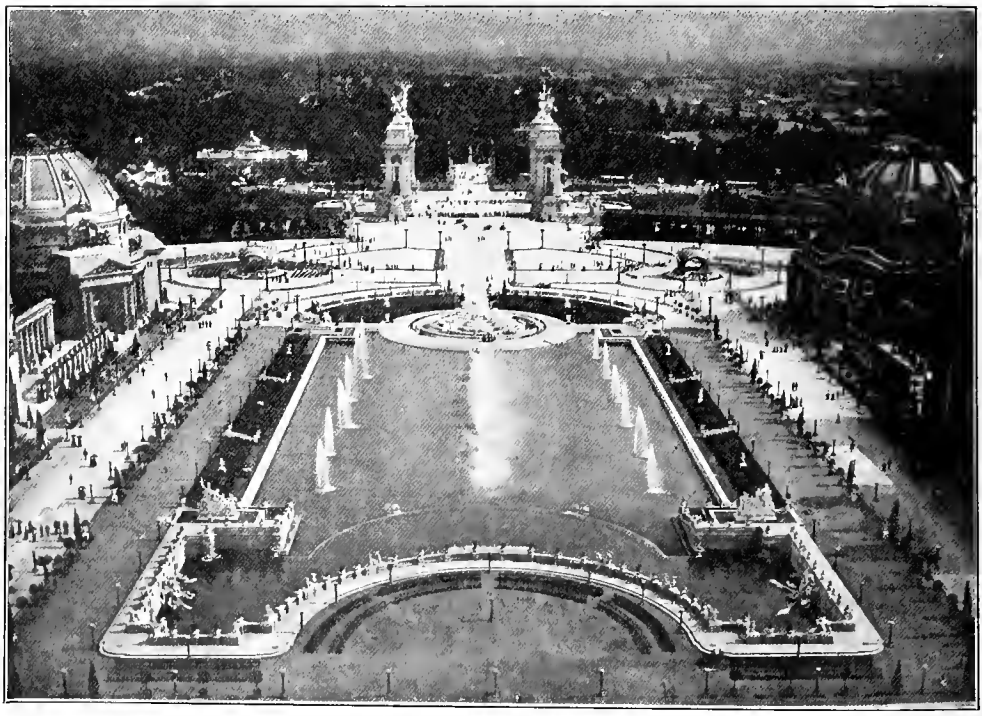
The Temple of Music at Night.

Buffalo, N. Y. THE PAN-AMERICAN EXPOSITION.

The Fountain: Carrère & Hastings, Architects. Temple of Music: Esenwein & Johnson, Architects.



Detail of Canal and Entrance Pylons.



The Court of Honor Looking Toward the Entrance.
THE PAN-AMERICAN EXPOSITION, BUFFALO, N. Y.
Buildings on Court of Honor by various architects.

CITY RESIDENCE OF JOHN M. CARRÈRE, ESQ.—DINING ROOM.

CITY RESIDENCE OF JOHN M. CARRÈRE, ESQ. (1902).—MUSIC ROOM.
101 East 65th St., New York City

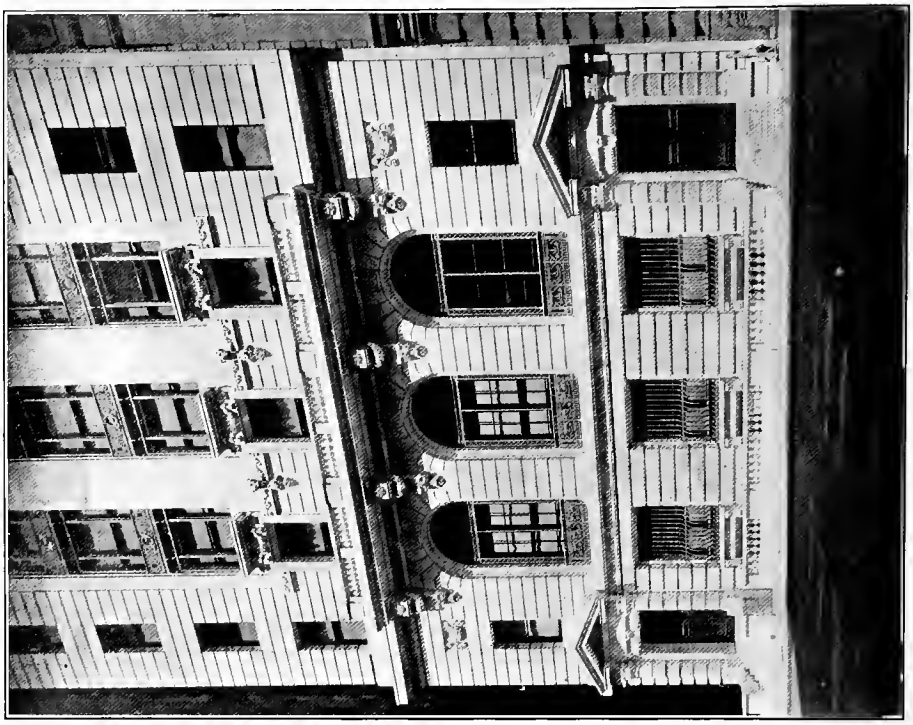
Newport, the Blair house in New Jersey, and the flat-roofed Goodyear house in Buffalo; and these differences can all be traced to the varying location and character of the different buildings. The situation of the Gambrill house, on a comparatively small piece of ground, in a highly fashionable watering place, demanded a treatment that should be festive, that carefully shut out the grounds of the neighboring houses, and that was adapted to open-air entertaining. We doubt whether there is another house in the country which is better planned and designed to meet the needs of its inhabitants, and which has at once more

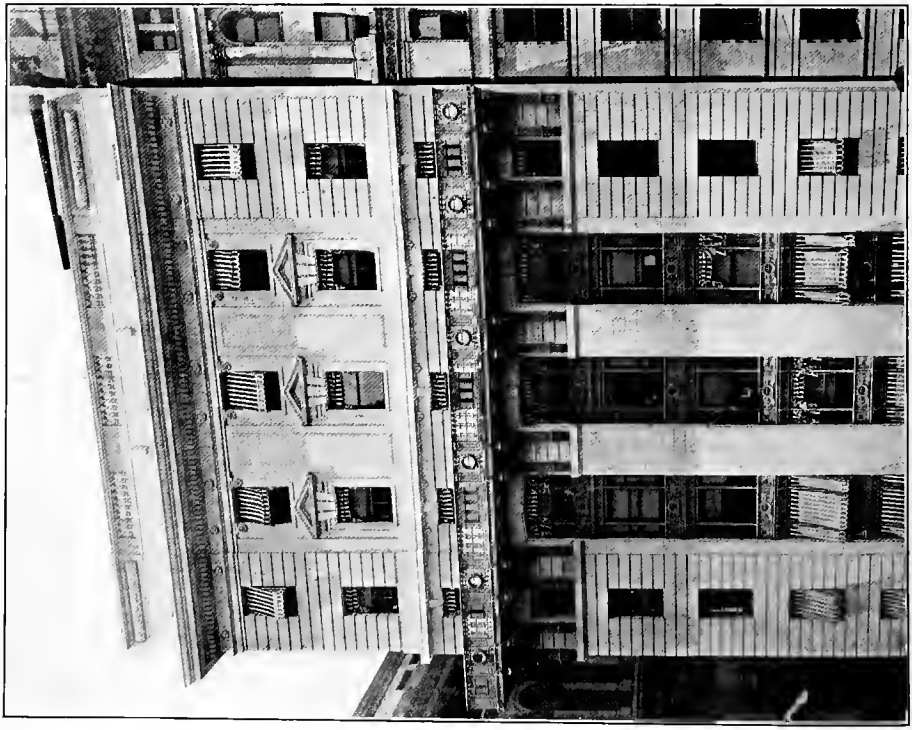
CITY RESIDENCE OF JOHN M. CARRÈRE, ESQ.—ENTRANCE HALL.
101 East 65th St., New York City.

Blair Building (1902).
Broad St., New York City.

style and more charm. The Blair house, on the other hand, occupied a conspicuous location in the midst of a large country estate; and its design and plan are determined by the necessity of commanding the view, of dominating and holding its own in the landscape, and affording its owners the opportunity of enjoying the more substantial pleasures of country life. The Goodyear house, finally, was situated in the immediate outskirts of a large city, where privacy was impossible and conspicuousness ostentatious; and the result is a house designed to be seen from a neighboring street, and bearing the scrutiny with a grave and graceful dignity. But these three houses, different, as they are, in plan, design and character, are all of them French of the best period, and arouse grateful, time-honored and worthy French associations.

The example of these three houses, and their clever adaptation to the different needs of their respective locations and owners, bring us to another essential characteristic of the work of Carrère & Hastings. Interested, as they are, in one particular sub-style, they are never merely seeking to reproduce an effect associated with certain historical buildings. They approach every new design from a new point of view, determined by the needs and conditions special to that job. They begin, that is, with a plan in which all the practical requirements are met, and which, in the case of a country house, is articulated with the layout of the grounds; and it is out of this plan that the design is put together. Their houses, consequently, with all their uniform propriety and distinction of appearance, are designed from within out; and in this respect they represent a better technical ideal and practice than the great majority of their predecessors. No architect should be obliged to ask a business man to subordinate the economic efficiency and productiveness of his building to an exterior effect. Neither should he be obliged to ask the owner of a private house to sacrifice some considerable convenience or practical need to the exigencies of mere appearance. As long





BLAIR BUILDING—DETAILS OF UPPER AND LOWER PARTS OF BROAD STREET FAÇADE.

Broad St., New York City.

COMPETITIVE DESIGN FOR CLEVELAND TRUST CO. (1903).

Cleveland, O.

RESIDENCE OF FRANK H. GOODYEAR, ESQ.

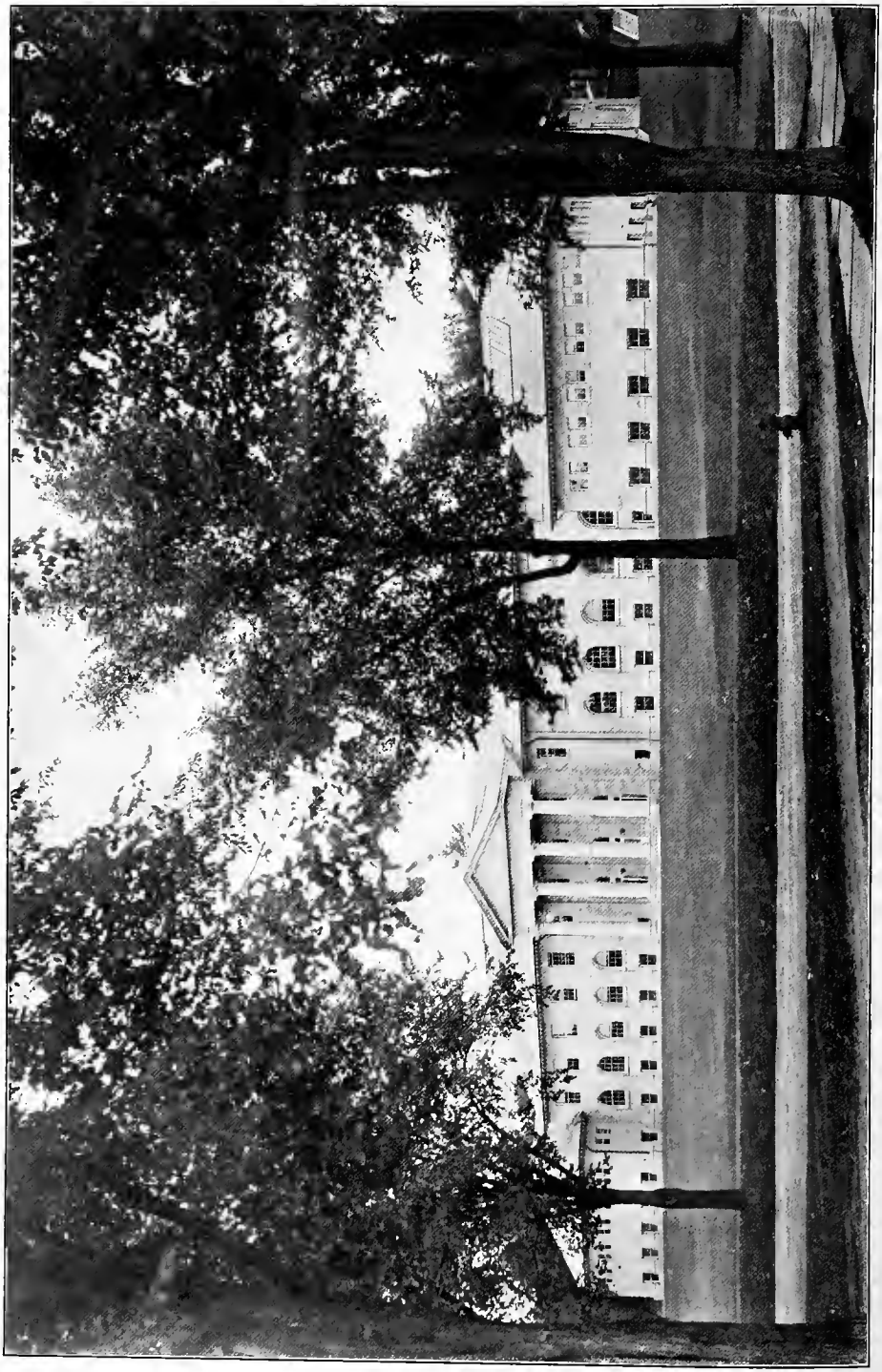
as the architect puts his clients in such a situation he can rarely win their entire confidence. It is his duty to accept loyally, in the interests of his client, all practical conditions and needs of any real importance, and then to build his design on these foundations. But, of course, he is no less responsible for making his design a success exclusively from the point of view of appearance. If his design turns out to be a loose and ill-combined collection of

RESIDENCE OF FRANK H. GOODYEAR, ESQ. (1903).

Buffalo, N. Y.

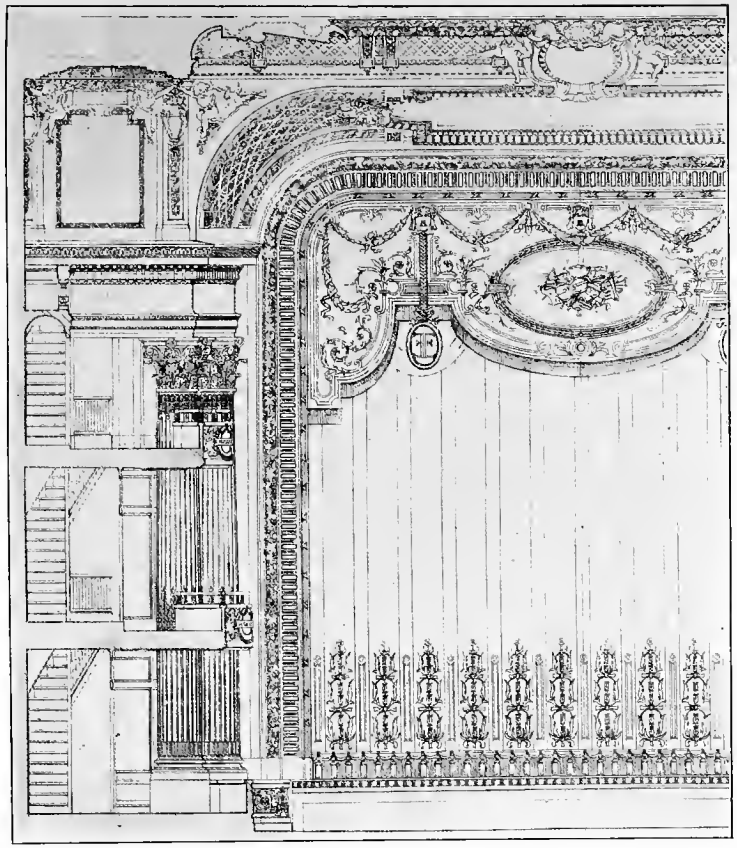
RESIDENCE OF FRANK H. GOODYEAR, ESQ. (1903)—HALL.
Buffalo, N. Y.

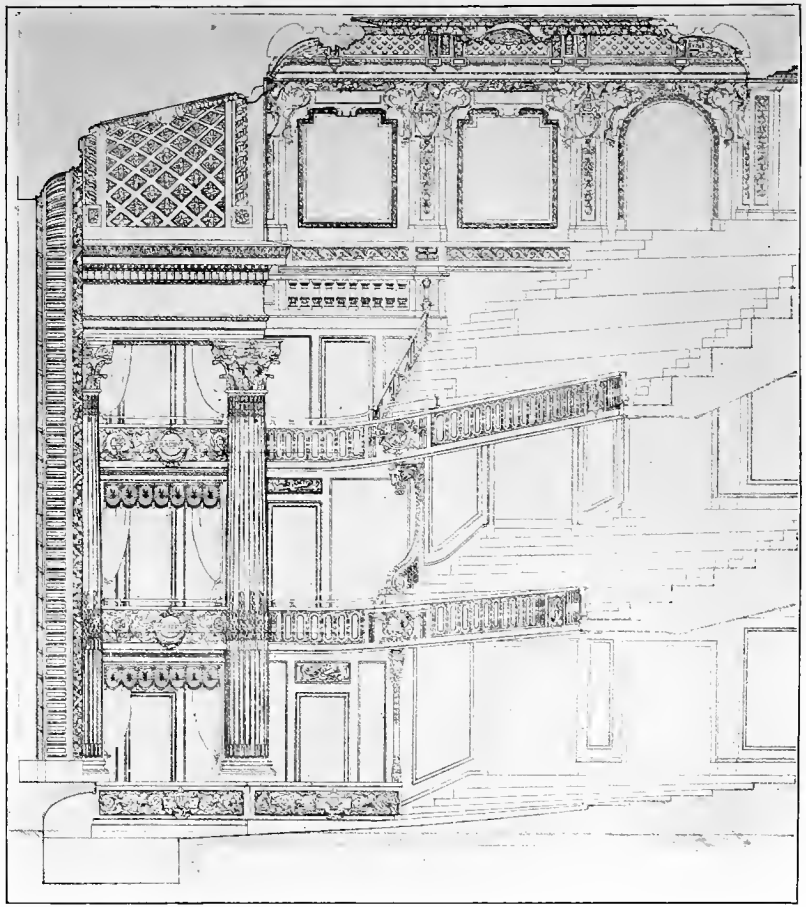
HOUSE OF S. W. GLAZIER, ESQ. (1903).
Elberon, N. J.



GOLDWIN SMITH HALL, CORNELL UNIVERSITY (1903).

Ithaca, New York.





New York City.

THE EMPIRE THEATRE—AUDITORIUM (1903).

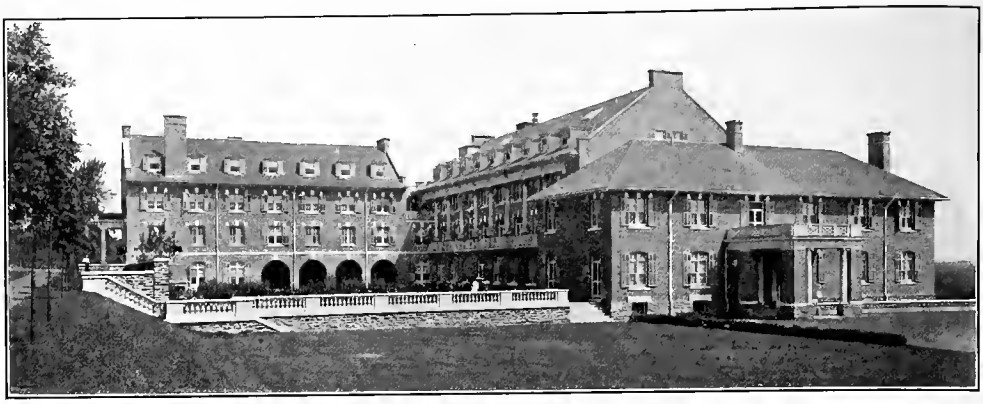
parts, or if, although consistent enough, it is wholly devoid of distinction and charm, the architect has no right to plead the exigencies of his plan. He must, somehow, imagine a beautiful exterior on the basis of a well-devised layout, and if he fails he cannot escape responsibility. Carrère & Hastings have been unprecedentedly successful in meeting the practical needs of their clients without any essential sacrifice of their own interest in designing not only good-looking houses, but houses embodying a definite historical style.

The importance which Carrère & Hastings have always attached to building up their designs on the foundation of a convenient, complete and consistent plan is, perhaps, the characteristic for which they deserve most praise. That no really permanent improvement can take place in American architecture except on the basis of the ingenious and sufficient adaptation of the buildings to their functions is a commonplace; but it is a commonplace which has frequently been ignored in American architectural history. During the period of hopeless decadence American builders lost the tradition of good planning, no less than the tradition of good designing. The Colonial houses, for instance, embodied usually

RESIDENCE OF HON. ELIHU ROOT (1903).
75th St. and Park Ave., New York City.

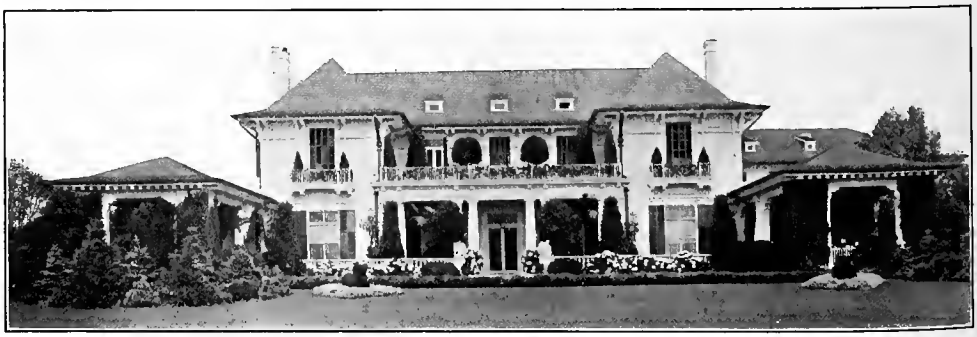
HOUSE OF MR. WM. K. VANDERBILT, JR. (1903).

Great Neck, L. I.



Greenwich, Conn. ELY SCHOOL (1905).

RESIDENCE OF HERMAN B. DURYEA, ESQ.—GARDEN. (1903).
Westbury, L. I.



RESIDENCE OF DANIEL GUGGENHEIM (1890).
Elberon, N. J.

RESIDENCE OF HERMAN B. DURYEA, ESQ. (1903).

Westbury, L. I.

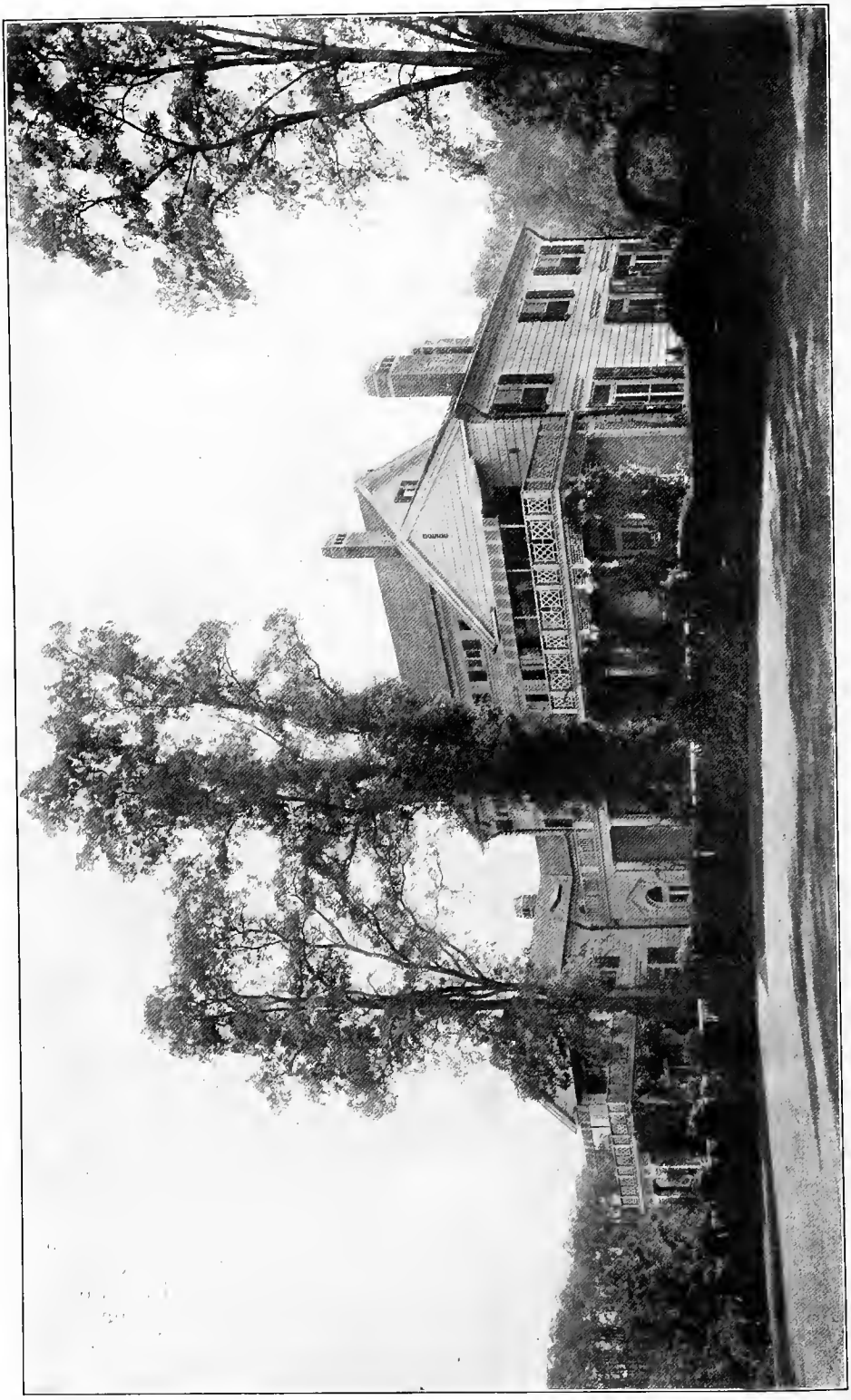
a simple, convenient and architecturally promising plan—one which served excellently the practical needs of the inhabitants of the houses, that articulated very well with the approach and the layout of the grounds, and which afforded an opportunity for designing well-proportioned rooms. But later every corruption of the methods of designing was accompanied by a corruption of the plan. The colonnades of the period of the Greek revival deprived the houses of the light necessary not merely to convenience, but to any beauty of interior effect. At the worst period the plans of the typical American city and country house were, if possible, uglier and more uncouth than their designs. The rooms, whether large or small, were ill-shaped, badly connected one with another, and cut to pieces by huge openings and various architectural excrescences. The interior was deprived of light by an excess of encircling verandahs, and the only respect in which they showed any glimpse of ingenuity was in the matter of certain improved mechanical arrangements in respect to heating and plumbing. Public buildings and those devoted to business were also just as inconvenient as they were ugly, and the worst aspect of it was that the average American was more attached to the familiar ineptitudes of these plans than he was to the lifeless mixture of corrupt historical forms which passed for architecture.

Buffalo, N. Y. DETAIL OF McKINLEY MONUMENT.

When the revival came it was natural that many of the earlier revivalists should have attached more importance to the designing of interesting-looking buildings than to the devising of really adequate plans. In the first place, improvement in design was the line of the least resistance because, as we have said, the average American was less likely to insist upon the familiar ugliness of the customary exteriors than he was upon the far more intimate solecisms

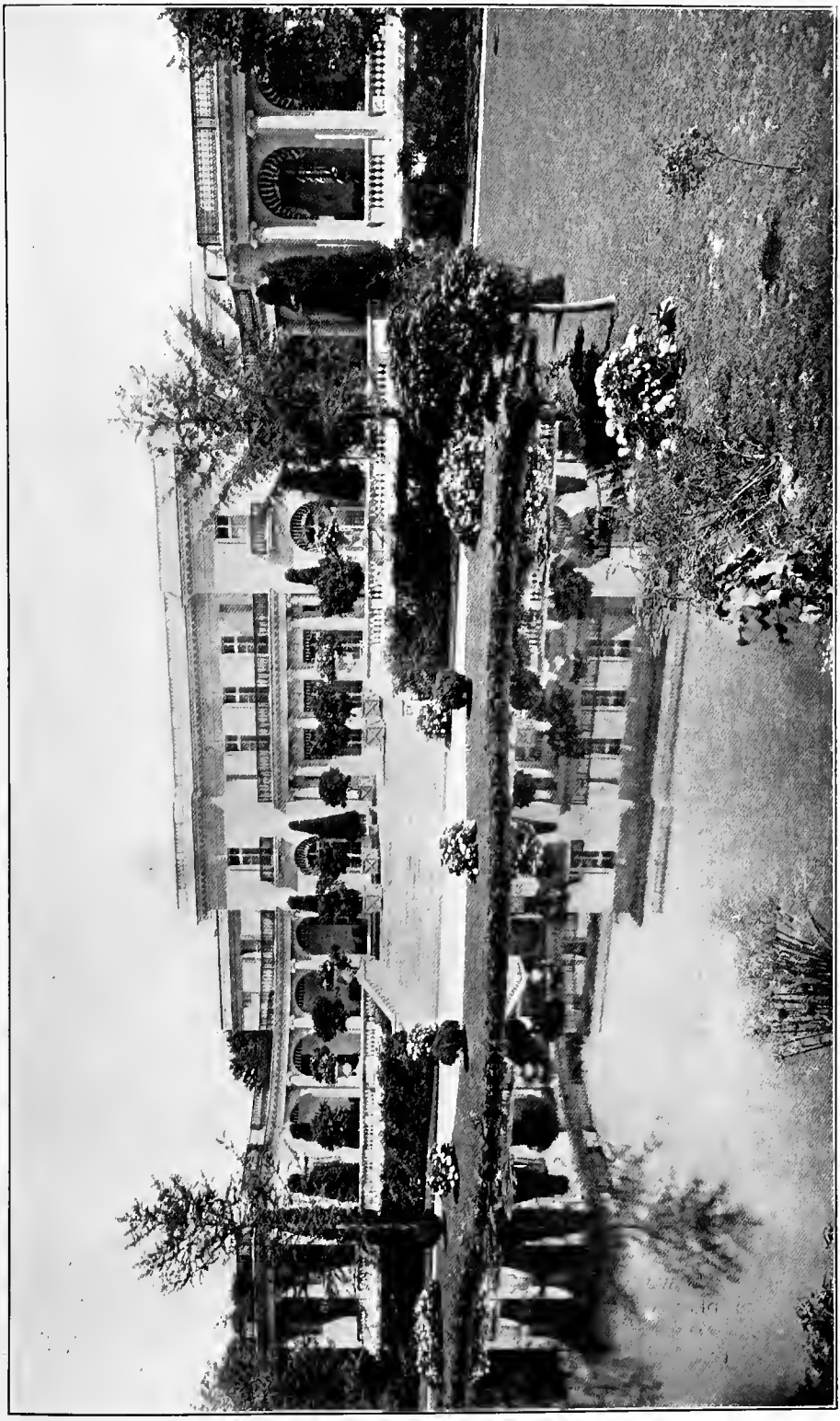
which surrounded his fireplace. Then the architects themselves were obliged to look upon their own buildings, but they were not obliged to live or to transact business therein; and in the first blush of reformatory zeal they inevitably tended to concentrate their energies and talents upon the attempt to make their buildings look more interesting. Of course the improvement in design necessarily brought with it certain immediate improvements in plan. So far as country houses were concerned the architect immediately declared war upon the old piazzas which deprived the best living-rooms of direct light, and made any propriety of exterior effect impossible. They also succeeded from the start in simplifying the plan, enlarging and enlightening the most important rooms,

Buffalo, N. Y. McKINLEY MONUMENT (1903).



ALTERATION TO HOUSE OF WM. BUTLER DUNCAN, ESQ. (1903).

Port Washington, L. I.



Elberon, N. J.

RESIDENCE OF MURRY GUGGENHEIM, ESQ. (1903).
(Gold Medal, N. Y. Chapter A. I. A.)

and of course in abolishing the most serious of the interior architectural solecisms. But after making all allowances for the influence of these earlier architects in doing away with some of the worst faults in the traditional American methods of planning both city and country houses, it remains true that their dominant interests were æsthetic. They improved the plan wherever such improvements were necessary to the improvement of the design, but they tended to sacrifice the plan to the design, whenever such a sacrifice was necessary, in order to make the building look more interesting.

That this insistent preoccupation with the appearance of their buildings served an excellent purpose in the history of American architectural improvement not only cannot be denied, but must be emphatically proclaimed. In order to revive popular interest in purity of architectural style and in bal-

FIRST NATIONAL BANK (1903).

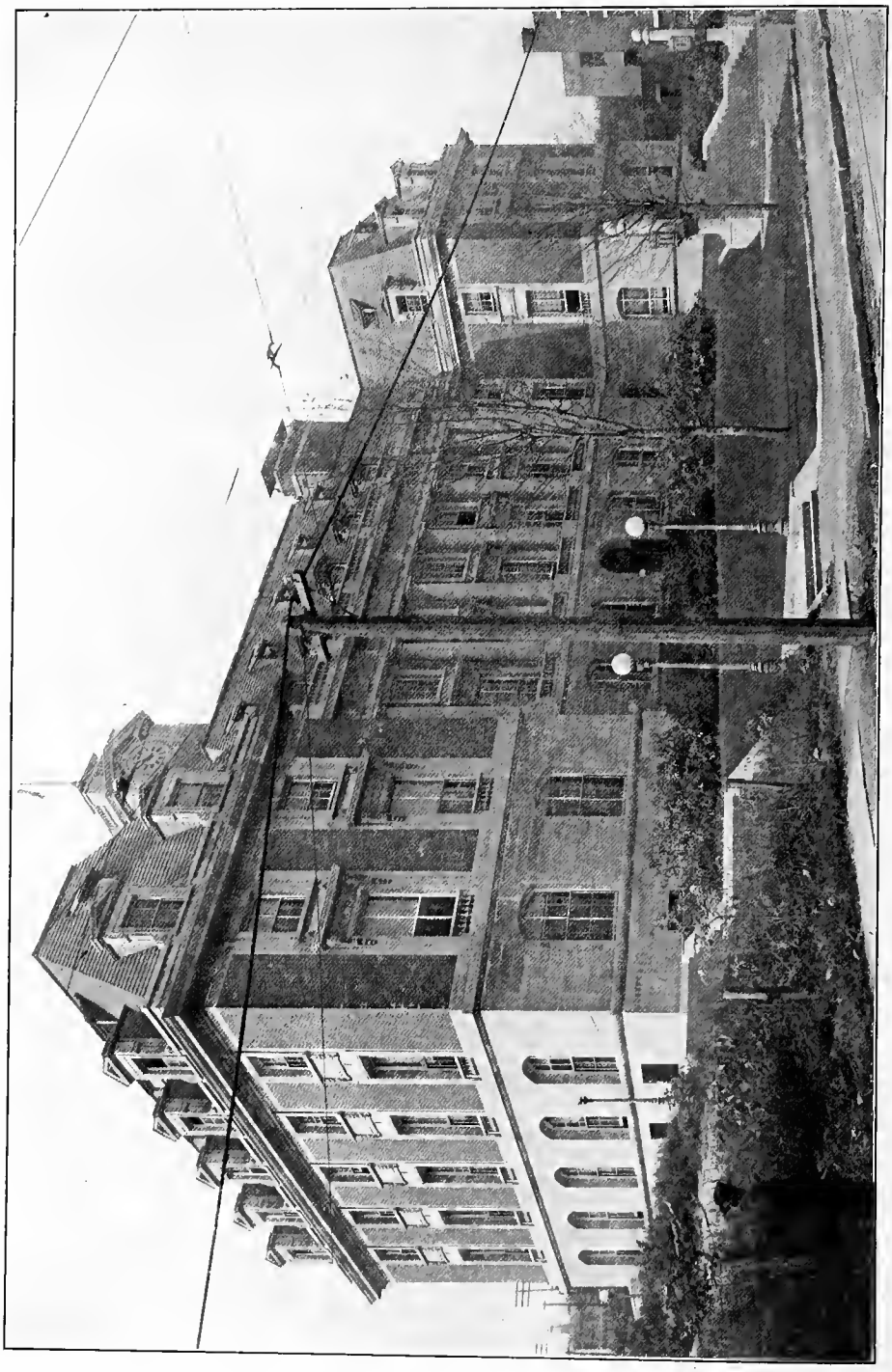
Paterson, N. J.

ance of architectural composition, it was absolutely necessary that the attention of educated and well-to-do Americans should be aroused by really entertaining and vigorous appeals to their historical and æsthetic sensibilities. But it is equally obvious that in the long run the neglect of intelligent and conscientious planning would not only hurt the American architectural revival in the minds of discriminating people, but would be corrupting in its general effect. Inconvenient and wasteful plans are not merely very annoying to the inhabitants of a building, but they have a tendency to result in pretentious and inappropriate architectural effects. If the architect was to become, as he should be, the dictator, who organized and combined the work of the various mechanical and technical experts, who contributed to the making of a building, it was obvious that his first duty was that of making the building serve in the most economical manner possible the function, or the combination of functions, for which it was constructed. Otherwise he would inevitably drift into the position of a man who applied an æsthetic cosmetic to the face of a building whose plan and structure were devised by an engineer. The plan of a building is inevitably its dominant aspect, and a practical people like the Americans will not put up with wasteful and inconvenient lay-outs. The only way in which an architect can vindicate his claim to supreme control over a building operation is through his ability to devise a simple and adequate plan.

FIRST NATIONAL BANK.

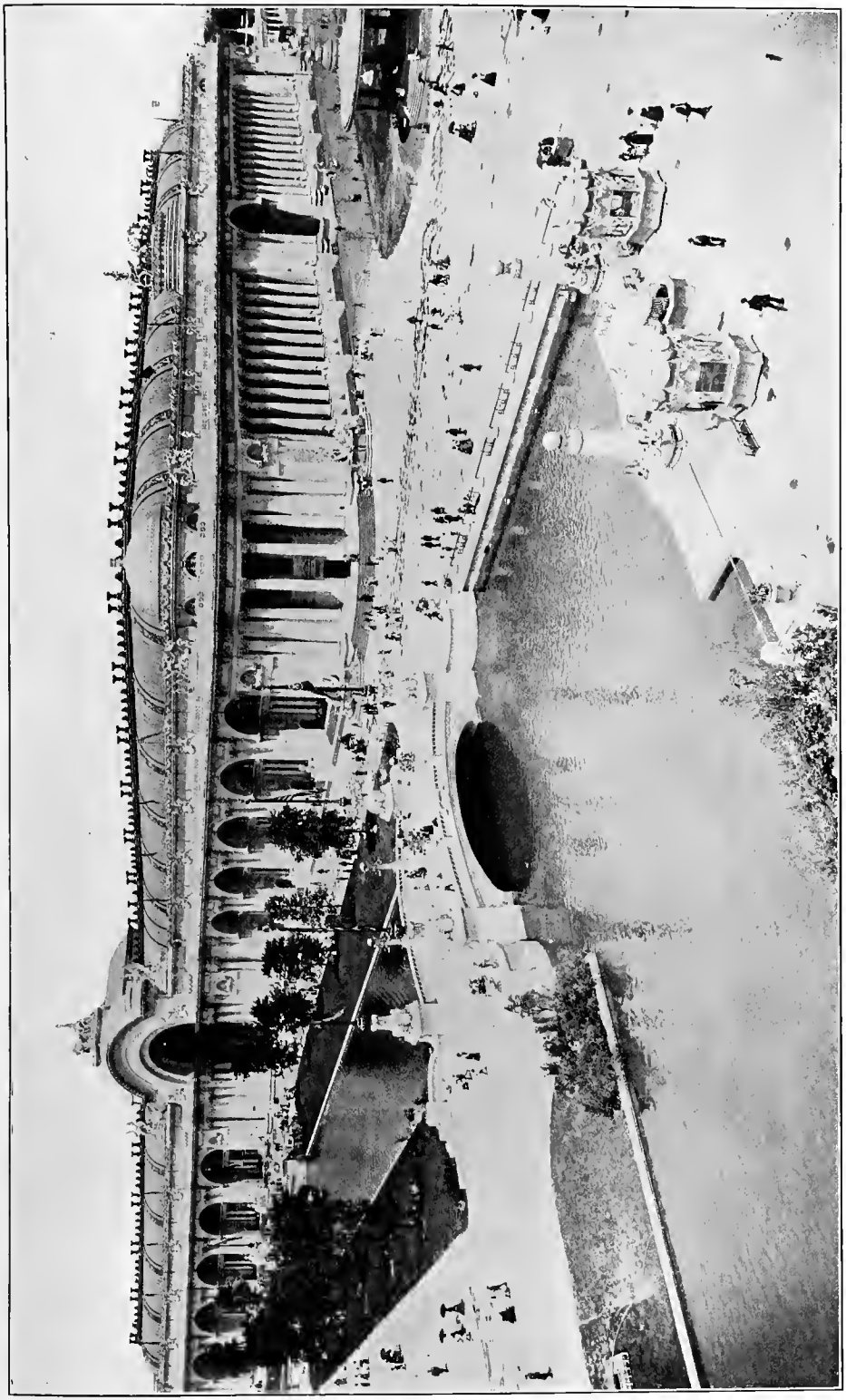
Paterson, N. J.

As a matter of fact that is precisely what the modern American architect has

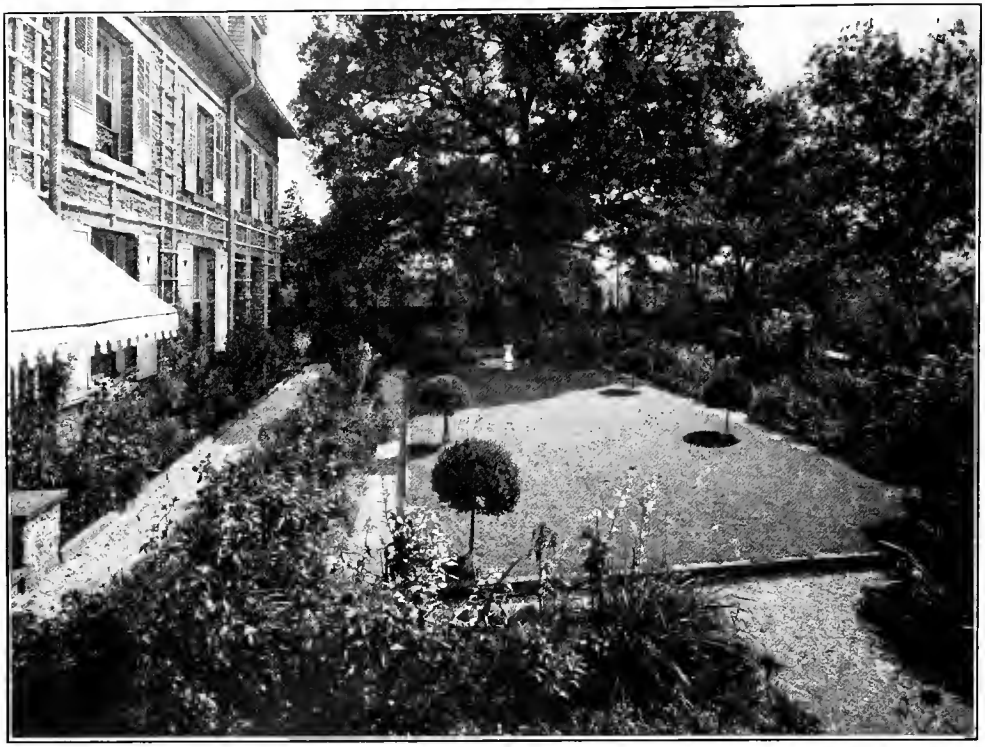


RICHMOND BOROUGH HALL (1903).

St. George, Staten Island.



ST. LOUIS EXPOSITION (1904)—AGRICULTURAL BUILDING.



COUNTRY RESIDENCE OF JOHN M. CARRERE, ESQ.—FORMAL GARDEN.

COUNTRY RESIDENCE OF JOHN M. CARRÈRE, ESQ. (1905).
White Plains, New York City.

FERRY TERMINAL AT ST. GEORGE, STATEN ISLAND (1904).

MANHATTAN BRIDGE NO. 3 (1905).
New York City. (Now Nearing Completion.)

been doing. The first and most important result of the school training which the present generation of American architects has been receiving is the restoration of the plan to its proper position in a general architectural method; and the success which the younger men trained in the great French school have been obtaining has been due chiefly to their thorough education in the art of simple and economical planning. Their clients can depend upon them to arrange the lay-out of a building so that its various parts will be grouped in a manner which will economize time and money, and serve admirably the combination of purposes for which the building was erected. And for the American architect this has become an extraordinarily difficult task. The contemporary American types of building, whether residences, hotels, schoolhouses, apartment houses or office buildings, are complicated beyond any other types of building in the history of the world. They contain a wholly unprecedented amount of machinery; and they must meet a wholly unprecedented variety of practical requirements. In planning them, consequently, the architect is confronted by a problem whose difficulty is equalled by its importance; and if he had not shown himself equal to the task he would inevitably have become merely the subordinate and the servant of the building engineer. That he has retained his pre-eminence in spite of the increasing importance of the purely engineering and practical problems involved by the construction of these buildings is a sufficient indication that he is performing his task efficiently and that he is receiving a training which in a sufficient measure prepares him for it.

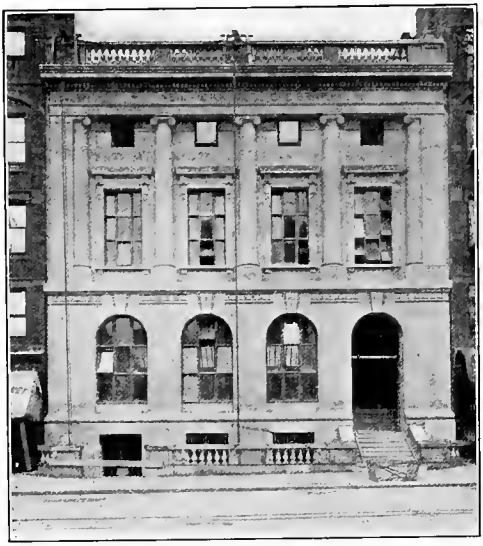
Carrère & Hastings deserve peculiar credit for the attitude which they have always assumed in relation to this all-

DETAIL OF MANHATTAN BRIDGE NO. 3.
New York City.

important matter. Their work has always been distinguished quite as much by conscientious and ingenious planning as by its more peculiarly æsthetic merits; and they were in this as in other respects intelligent and consistent innovators. The importance which they have always attached to their plans was doubtless the result partly of the unusually prolonged and thorough school training enjoyed by the members of the firm; but it was also partly the result of their practical good sense and their grasp of the realities of architectural design. They realized from the start, and acted on that realization, that the modern American architect must vindicate his pre-eminence by the adequacy of his plans; and they acted on the knowledge at a time when the tendency of American architectural practice looked in another direction.

They sum up in their work better than any other single firm the really progressive and formative movement of modern American architecture. They have overlooked no idea of essential importance which would tend to give their work increasing propriety, dignity and effect. There have been and are other architects whose plans have been just as worthy of careful consideration, and which have been the result of just as conscientious and ingenious study as those of Carrère & Hastings. There have been and are other architects who have designed their buildings with as fine a sense of the proprieties of form as is exhibited in the better buildings of Carrère & Hastings. But there is no

FLAGLER MAUSOLEUM (1906).
St. Augustine, Fla.

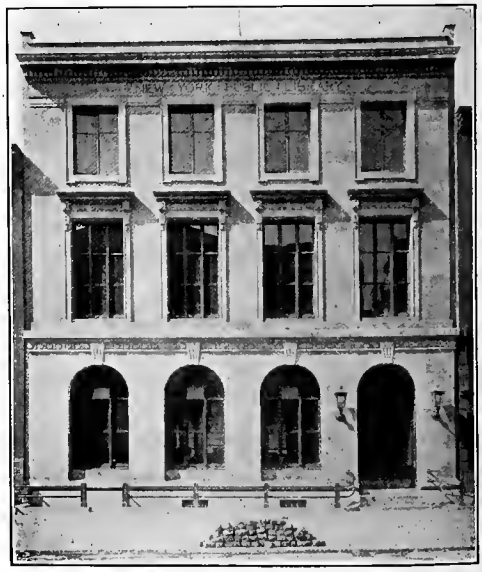


New York Public Library, Branch No. 8.
192 Amsterdam Ave., New York City.
Carnegie Circulating Branch.

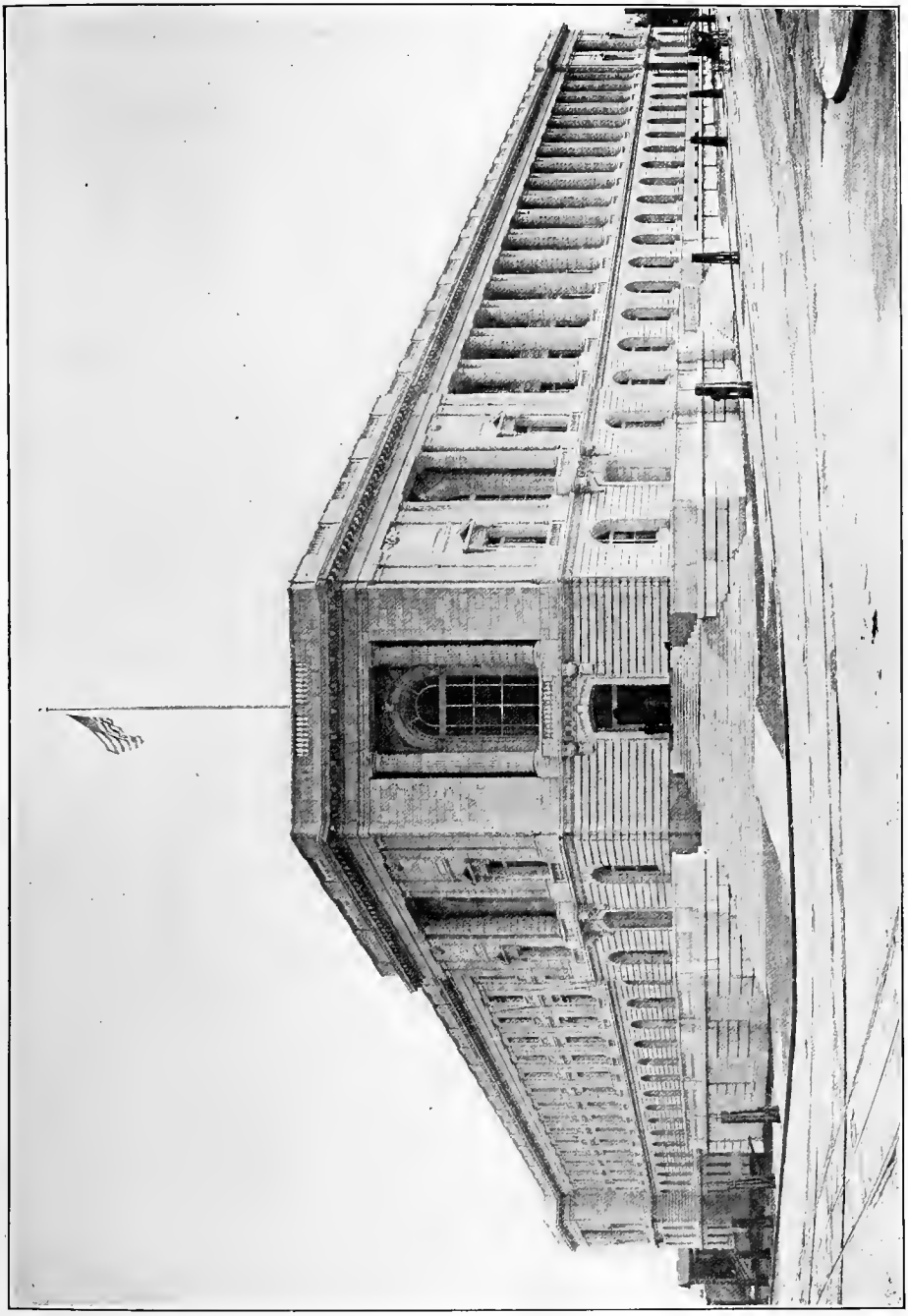
other American architect or firm of architects who have united so much excellence in their plans with so much beauty and distinction of design.

In the case of buildings of the highest architectural excellence a convenient and economical plan issues with apparent inevitability in an appropriate and effective design. The two different aspects of the complete building are at bottom supplementary and are scarcely distinguishable whenever the architect manages to achieve a really brilliant success. But inevitable as the relation frequently appears to be in many successful buildings, its achievement has always been the result of patient and painstaking work, ingenuity, and an ability to discriminate between the essential and unessential elements both of plan and design. In the case of every complicated building the varying practical requirements will conflict both with one another and with some desirable architectural effect, and the completed result almost always betrays to the trained eye the series of sacrifices and compromises whereby the successful building was purchased. The architect exhibits his underlying interest in nothing so much as in his choice of what he will sacrifice in the event of some important conflict. The tendency of an imaginative man is usually to make his building beautiful and effective at any cost. On the other hand, many conscientious and excellent architects succeed in elaborating plans which are marvels of simplicity and convenience, but seem unable to give those plans an architectural body expressive either of grace or energy.

Evidences of the inevitable conflicts between plan and design can be detected in the work of Carrère & Hastings; but their peculiar merit consists precisely in the fact that they have held an admirable balance among the conflicting demands made upon them by their work. They have designed buildings which at once are beautiful, effective and convenient. They have accepted and developed the idea that American architecture should accept the spirit and tradition of the Renaissance architectural forms, while at the same time they have sought to make their buildings thoroughly real and modern in the sense of making them thoroughly practical. One can detect in the policy of the firm towards all the problems which confront the modern



New York Public Library, Branch No. 15.
235 East 25th Street, New York City.



OFFICE BUILDING OF THE HOUSE OF REPRESENTATIVES (1906).
Carrère & Hastings, Consulting Architects.
Elliott Woods, Superintendent U. S. Capitol and Grounds.

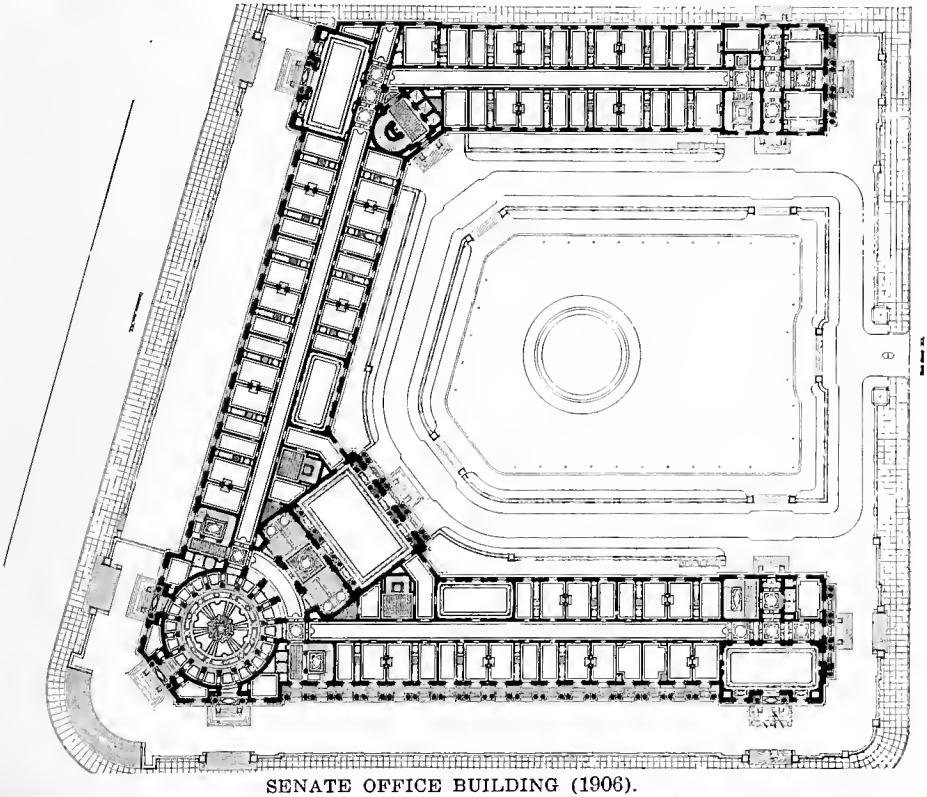
Washington, D. C.

Washington, D. C.

OFFICE BUILDING, HOUSE OF REPRESENTATIVES (1906).

Carrère & Hastings, Consulting Architects.
Elliott Woods, Superintendent U. S. Capitol and Grounds.

CAUCUS ROOM.

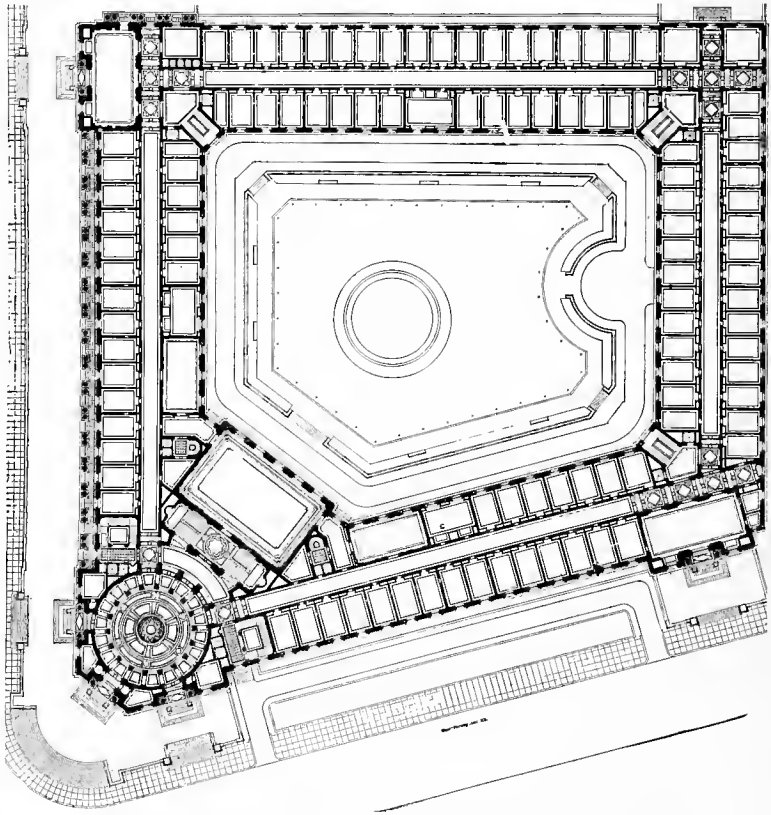


SENATE OFFICE BUILDING (1906).

Washington, D. C.

Carrère & Hastings, Consulting Architects.
Elliott Woods, Superintendent U. S. Capitol and Grounds.

CAUCUS ROOM.



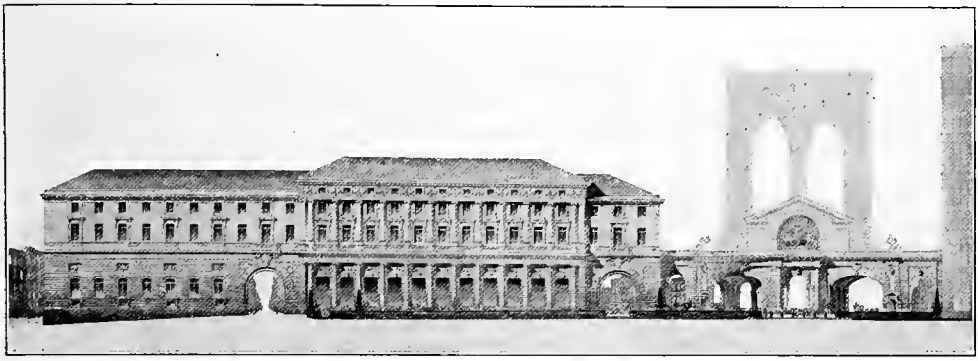
HOUSE OF REPRESENTATIVES OFFICE BUILDING (1906).

Washington, D. C. Carrère & Hastings, Consulting Architects.

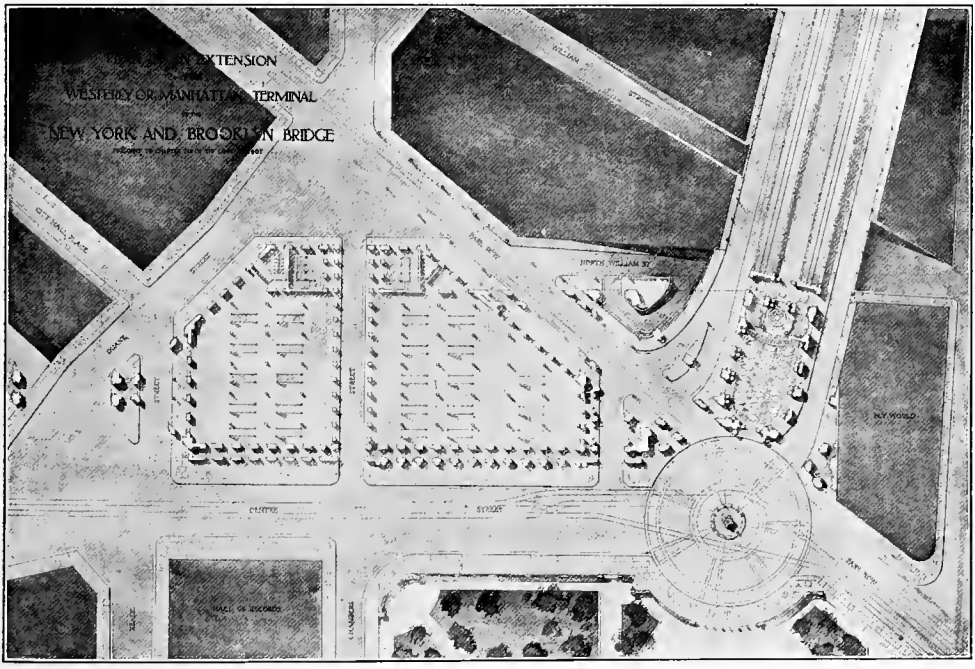
Elliott Woods, Superintendent U. S. Capitol and Grounds.

American architect the evidence of a clear and well-balanced intelligence, co-operating with a lively imagination; and the result is an illustration of how much may be accomplished by loyal collaboration on the part of two men differing widely from each other in temperament and point of view.

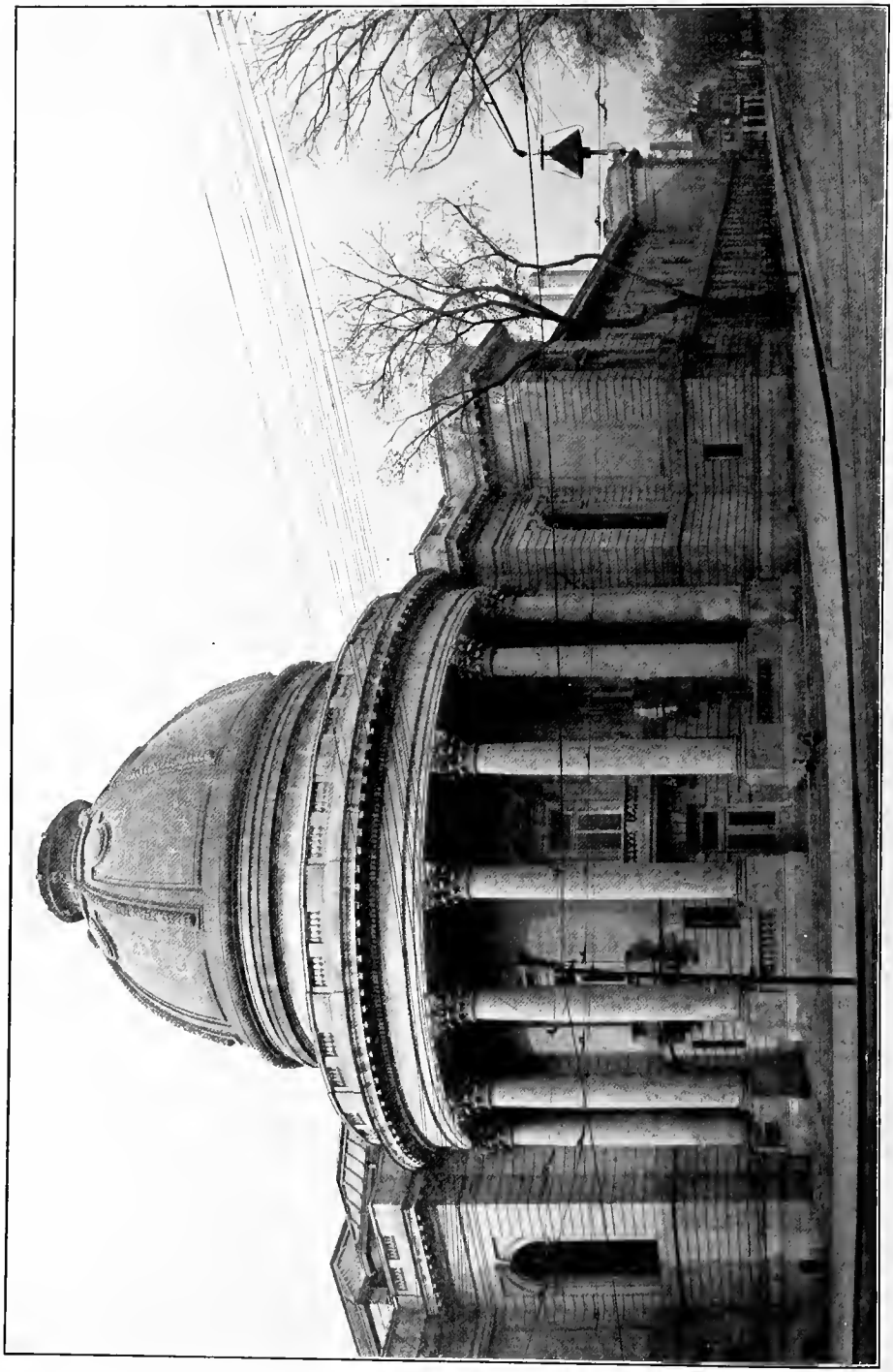
Even the most ardent admirers of Carrère & Hastings could hardly claim that they have always been successful in associating with their successful plans a wholly successful design. When any conflict occurs between the needs of the plan and that of the design, the latter is usually sacrificed; and if a choice must be made, it is assuredly better to sacrifice the design rather than the plan. But wherever the design is really hurt by such a sacrifice the architect cannot escape a certain responsibility for the injury. It is his business somehow to work out a practical plan which demands no sacrifices from an equally satisfac-



DESIGN FOR BROOKLYN BRIDGE APPROACH AND TERMINAL (1906).

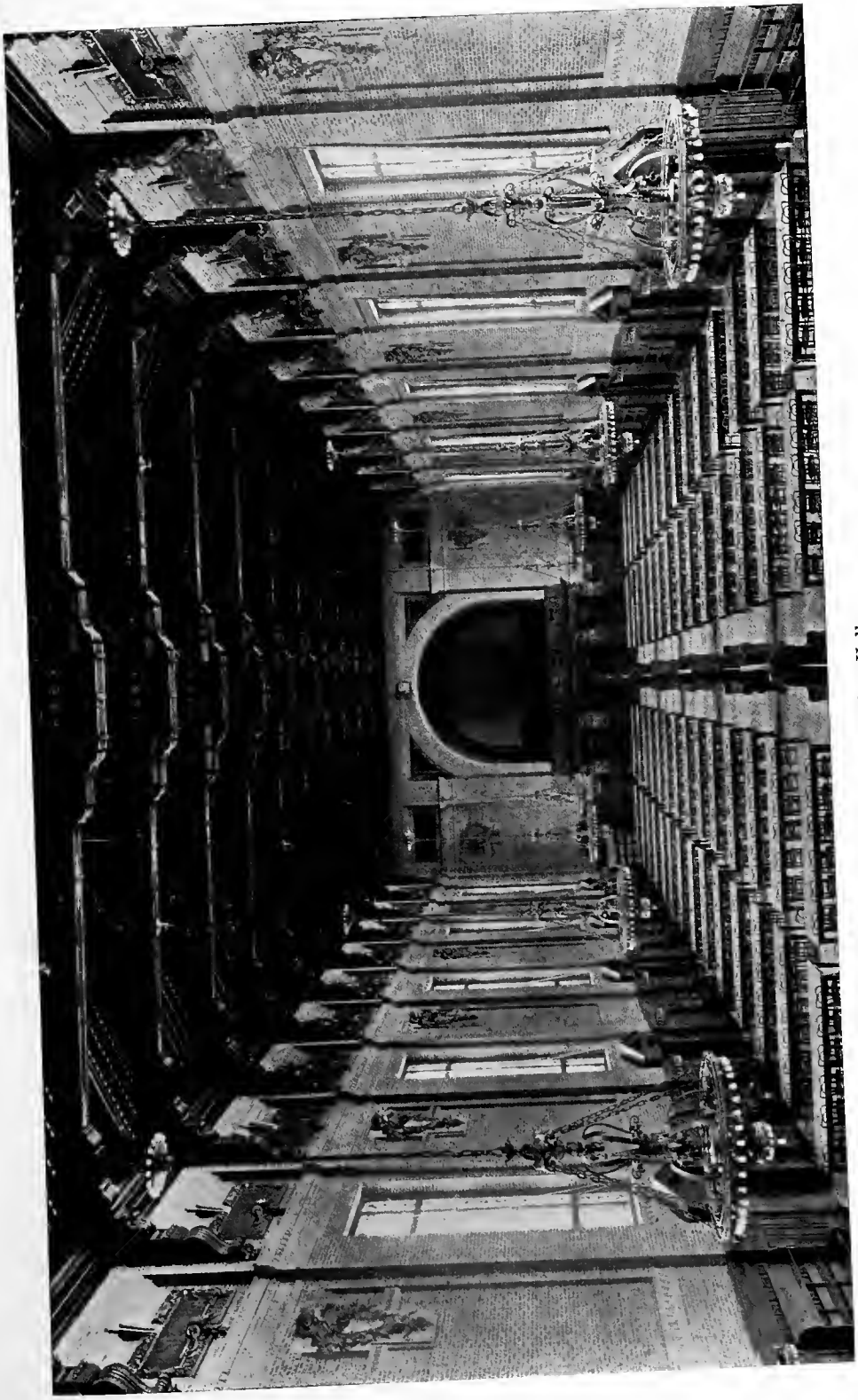


PLAN.



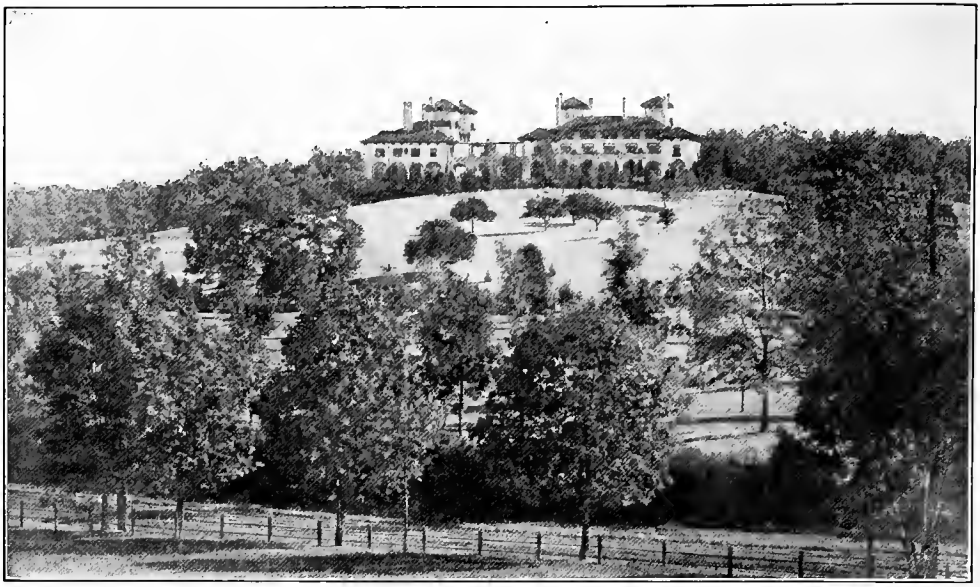
MEMORIAL BUILDINGS, YALE UNIVERSITY (1906).

New Haven, Conn.

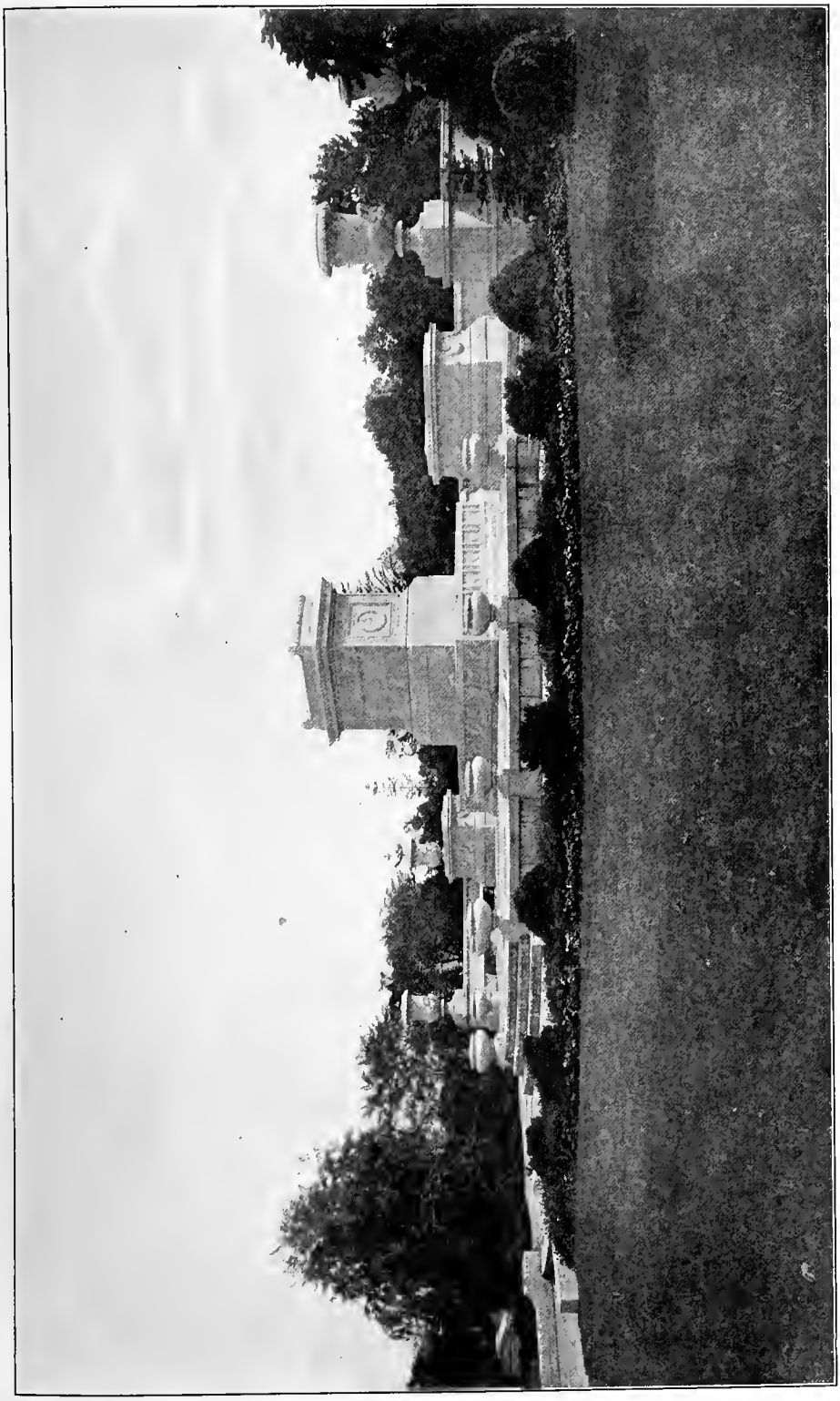


Dining Hall.
MEMORIAL BUILDINGS, YALE UNIVERSITY (1906).

New Haven, Conn.

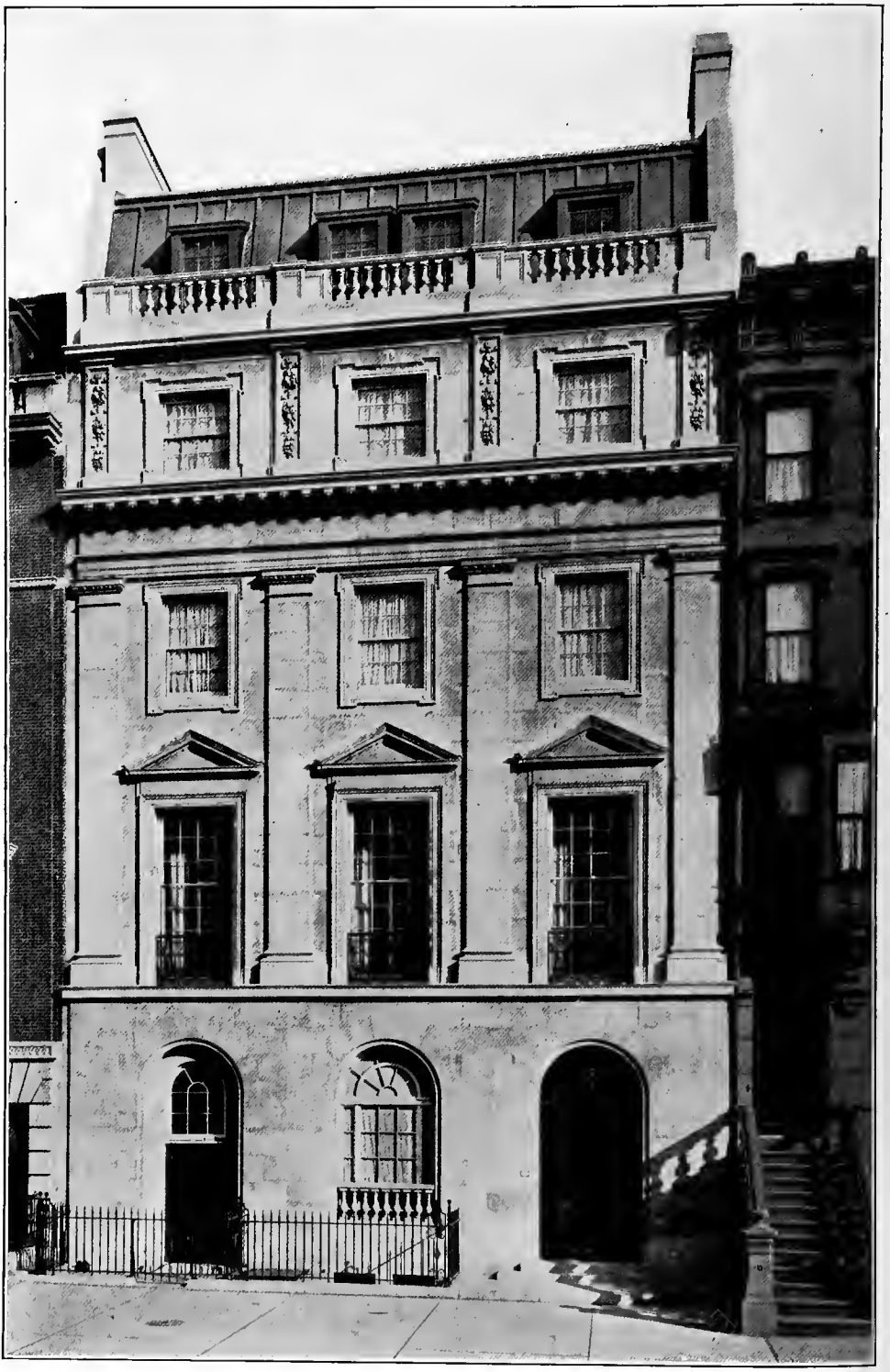


RESIDENCES FOR MR. OTTO H. KAHN AND MR. HENRI WERTHEIM.
Convent, N. J.



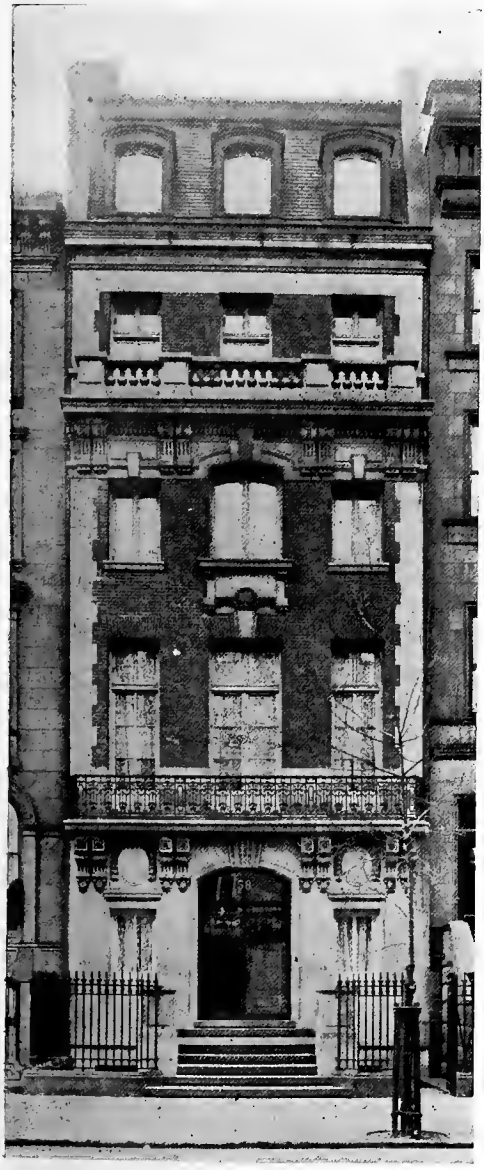
THE M. C. D. BORDEN TOMB (1906).

Woodlawn Cemetery, New York City



RESIDENCE OF GEORGE L. RIVES, ESQ (1908).
69 East 79th Street, New York City.

tory design, and if he does not do this he must accept the responsibility for the failure. In the case of some of Carrère & Hastings' most important buildings

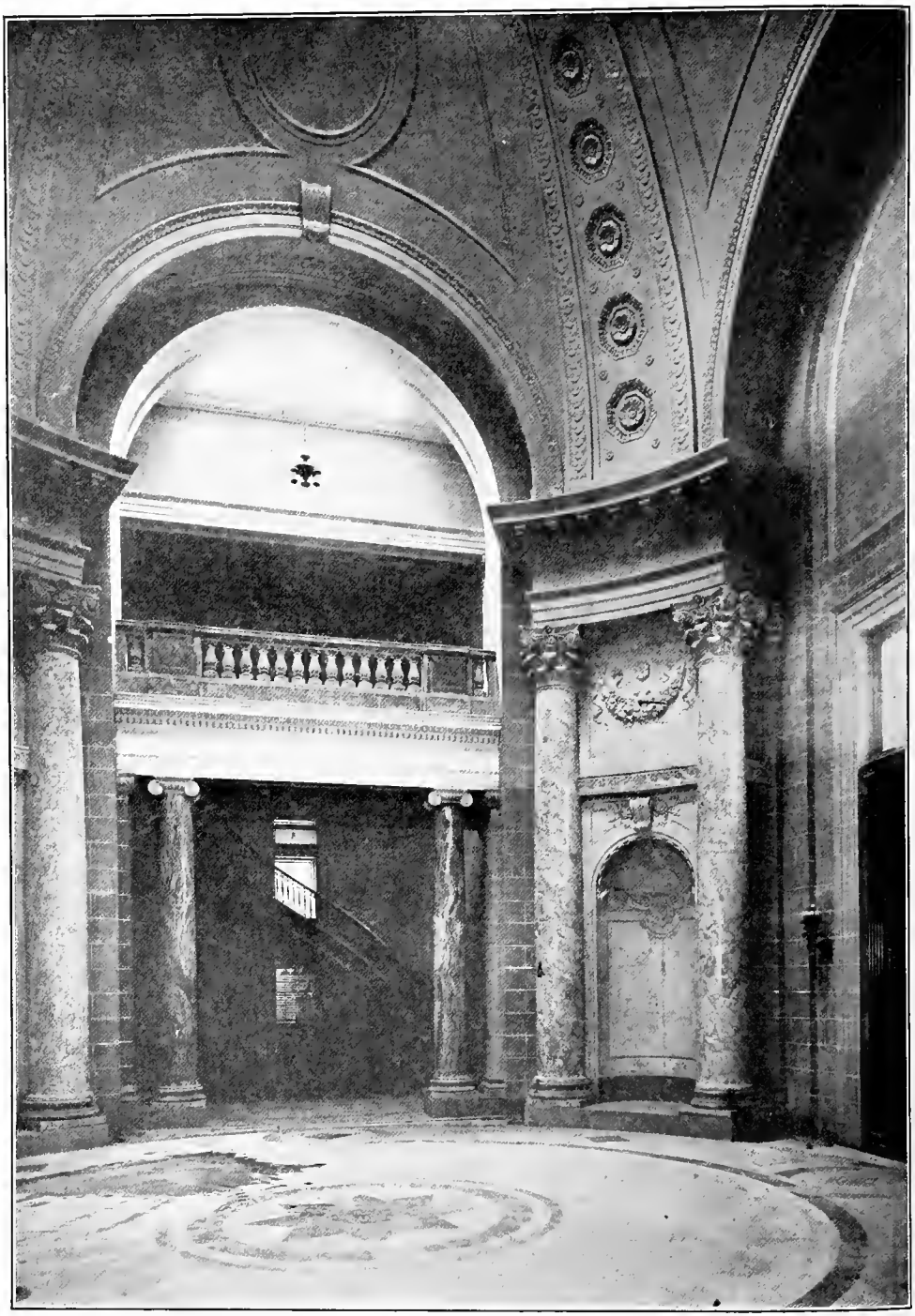


Residence Burrall Hoffman, Esq. (1898). 59 East 79th St., New York City.

they have been unable to avoid certain sacrifices of this kind. At a certain point, for instance, in the attic of the New Theatre the design simply ends and the architects have allowed the remainder of this crowning feature to take care of itself. In the case of the new Public Library the spaces of blank wall, relieved only by niches on either side of the arched portals, must assuredly be explained by certain necessities of the plan rather than of the design; and the stilted arches of the entrance hall are simply tantamount to the confession of a difficulty rather than to its solution.

Blemishes such as those illustrated above are peculiarly difficult to avoid in a building like a Public Library, which must be monumental in its effect while at the same time meeting a group of exacting and complicated practical requirements. It must be said, in justice to the designers, that neither of these structures is entirely finished, and it may be that what is at present lacking can materially alter the ultimate effect. But in case the architect does not succeed in avoiding such blemishes he can hardly claim a complete success; and in so far as such sacrifices occur in the buildings of Carrère & Hastings, they must be entered on the debit side of the account—even though it be also admitted that the debt was incurred in a good cause. When, however, allowances have been made for all such deductions the fact remains that among the public buildings erected by the present generation of American architects those of Carrère & Hastings are distinguished both by their beauty and their popularity. They have held their own even in a sphere in which their devotion to conscientious planning might have been supposed to place them most at a disadvantage.

At the present moment Carrère & Hastings occupy a place peculiarly their own in the ranks of the profession. They stand as do no other firm both for a tradition and a promise—both for a fulfilment and a prophecy. Although by no means the first important American architects trained in the school, they have done more than any other firm to introduce into American design the advantages without the limitations of the school training. And one would not dare to assert with any con-



CARNEGIE INSTITUTION OF WASHINGTON—ROTUNDA.
Washington, D. C.

CARNEGIE INSTITUTION OF WASHINGTON (1909).

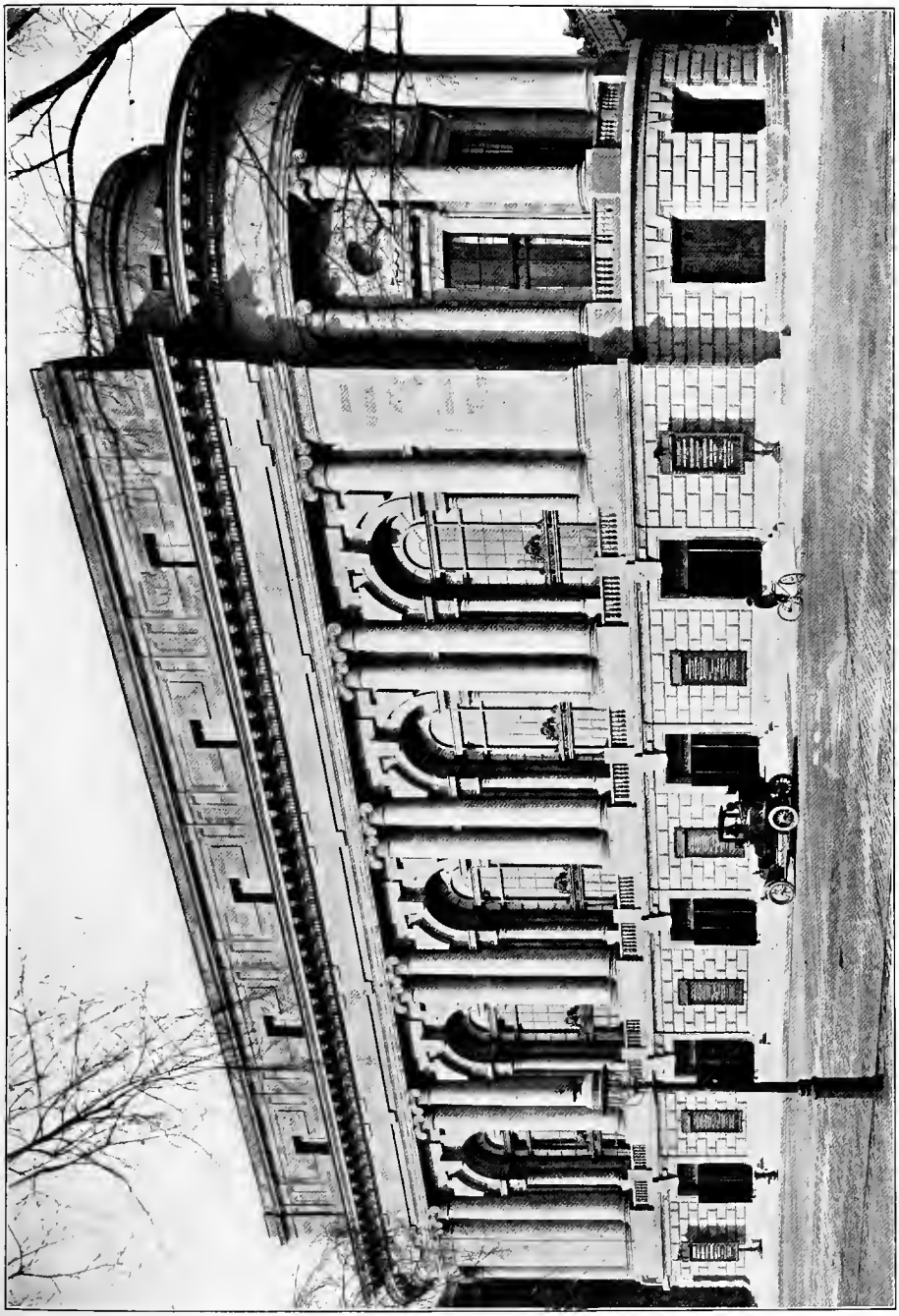
Washington, D. C.

fidence whether they have rendered a better service in making admirable use of the better technical methods or in refusing to become nothing more than French architects, practicing in the United States. They were the first prominent American architectural firm to stand consistently and intelligently for the results of French training and the forms of French architecture; but their innovations were always made in a conservative spirit, and with an intelligent understanding of the need in this country not merely of thorough training, but of the guiding influence of a sound tradition.

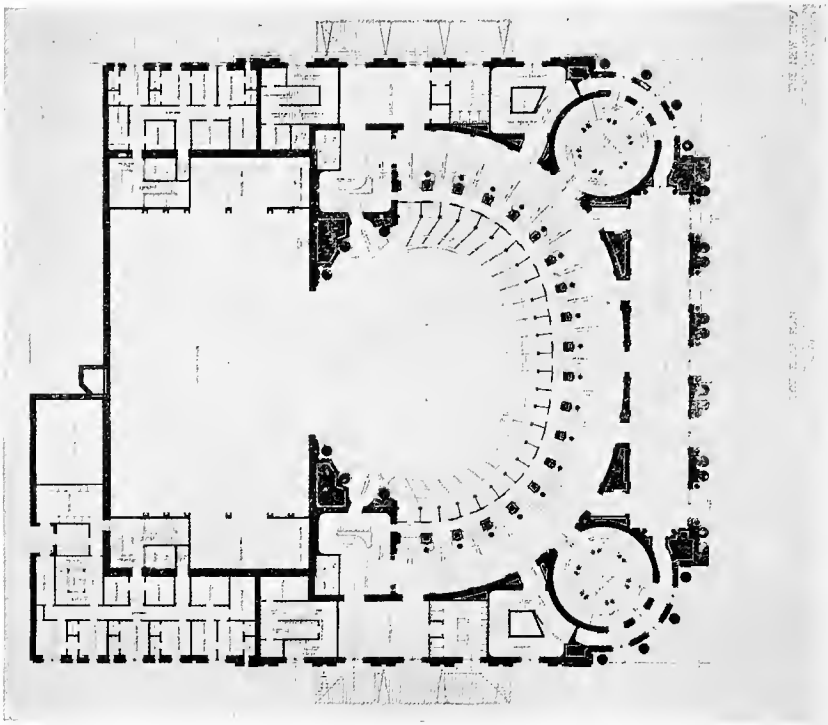
Their work and their influence has, consequently, been sound and constructive from practically every point of view. The two great needs of American architecture are the establishment all over this country of a vigorous standard of technical achievement, and of a sound convention of architectural form. The necessary technical training must be derived largely from prolonged and serious scholastic work; and even when such schooling takes place in this country its methods must, on the whole, be based on those of the great Parisian Ecole. Hence, for the present, at least, American architecture must necessarily submit to the influence of French methods and of French forms; and even those people who do not relish the prevailing tendencies of modern French architecture and its American imitations should admit the inevitability of this French influence and its, on the whole, desirable results. If American architects cannot, in the course of time, profit from what is excellent in French training, while emancipating themselves from what is meretricious in the French example, it will be the fault of their own unintelligence and lack of personal and national independence. They certainly have been shown the way. Carrère & Hastings among others, but first among others, have profited from the excellence of French training and have detected the advantages of adapting French forms; but they have done so in a manner which was at once sympathetic, spirited and discriminating. They have understood that American architecture needed not contemporary French fashions, but the time-honored French tradition of style, while, at the same time, they have begun the transformation of French tradition of style to American needs by the special treatment of each architectural problem on its own individual merits.

CARNEGIE PUBLIC LIBRARY (1906).

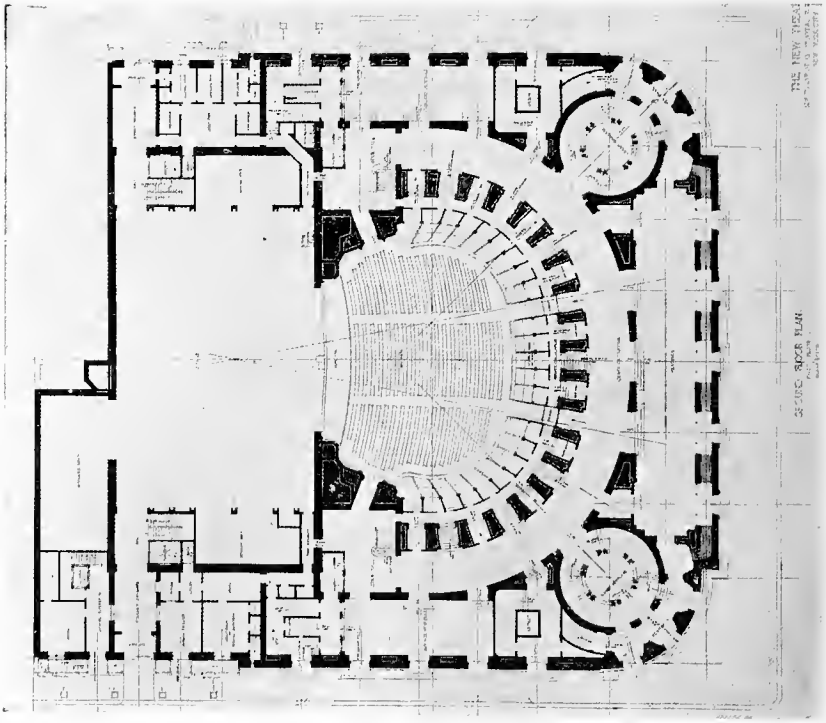
St. George, Staten Island.



THE NEW THEATRE (1906).
Central Park West, 62d and 63d Streets, New York City.
(Photo by A. Patzig.)



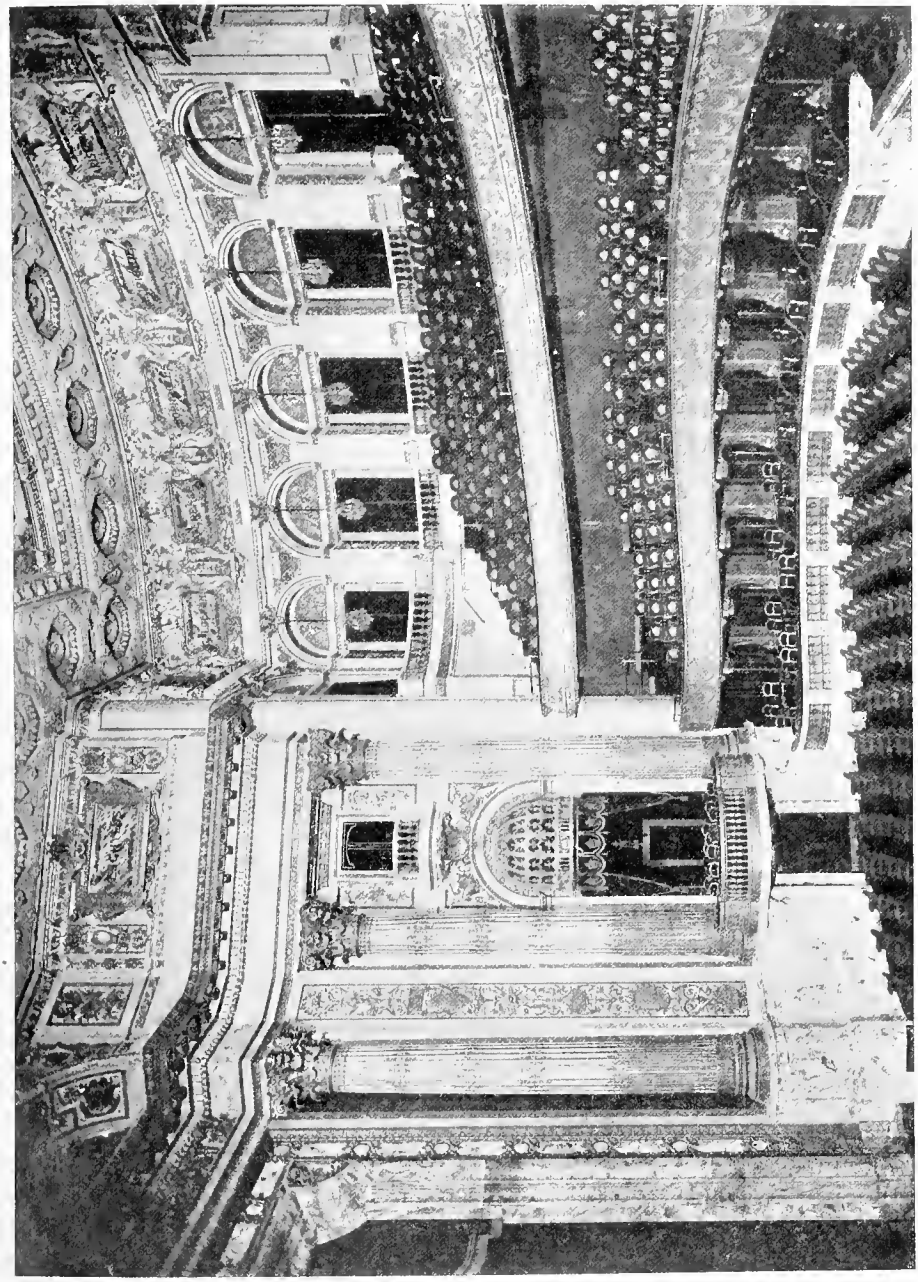
Foyer Floor Plan.



Ground Floor Plan.

THE NEW THEATRE (1906).

New York City.



THE AUDITORIUM OF THE NEW THEATRE.
(Copyright, 1909, by The New Theatre.)

New York City.

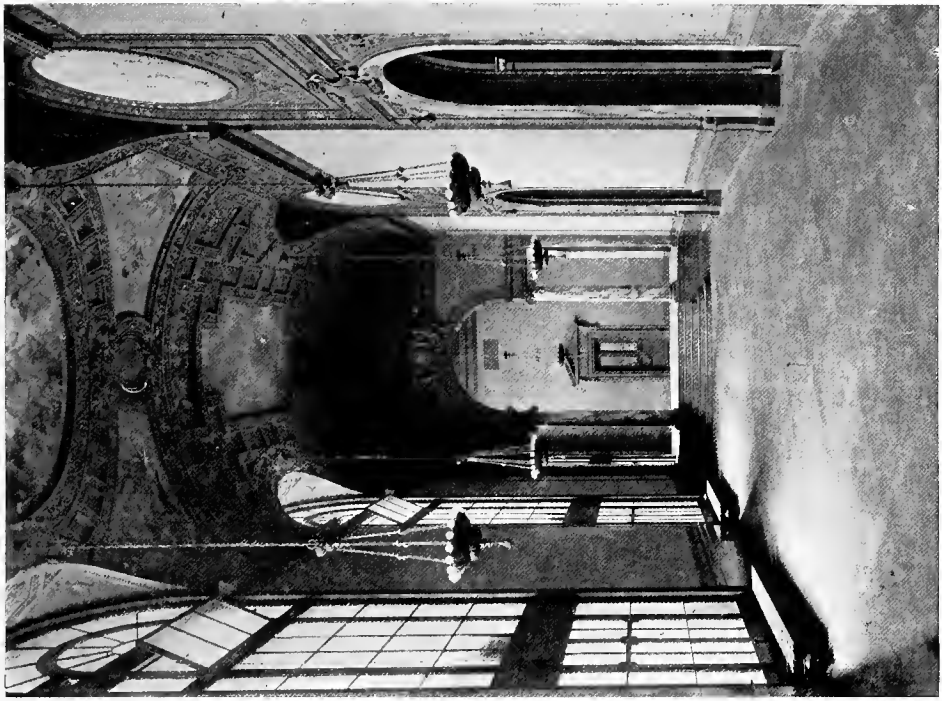
Lobby.

Corridor.

THE NEW THEATRE.

Central Park West and 62d and 63d Streets, New York City.

(Photos copyright, 1909, by The New Theatre.)

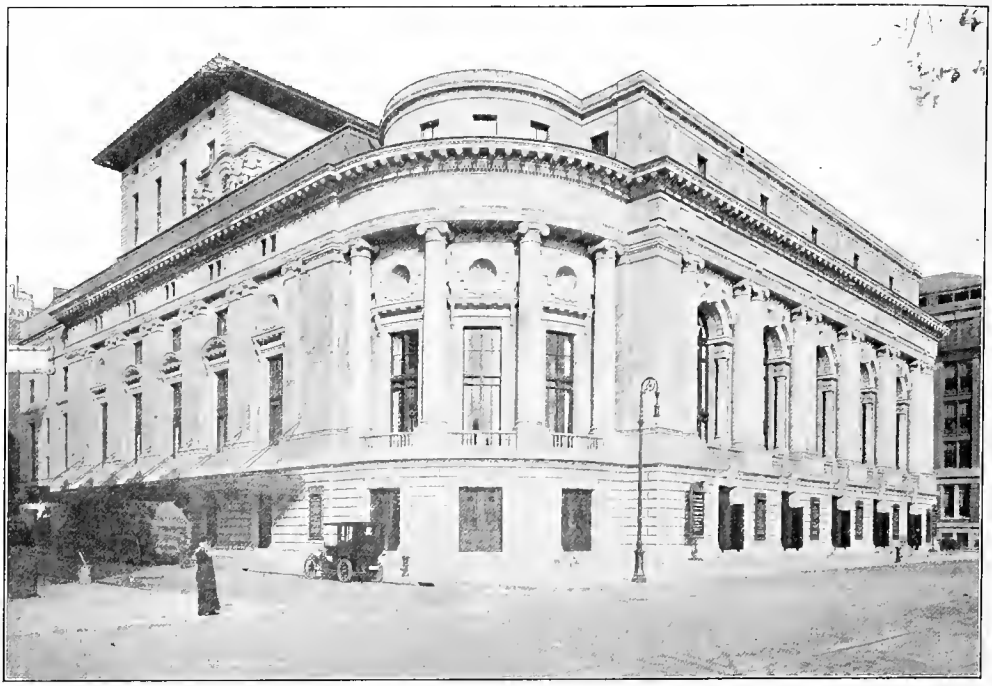


Foyer.

Baudry Painting on Ceiling of Foyer.

THE NEW THEATRE.

New York City.



THE NEW THEATRE.

New York City. (Photo by A. Patzig.)

A Complete List of the Clients of Messrs. Carrère & Hastings

(NOTE:—The following list contains the clients of Messrs. Carrère & Hastings during their existence as a firm—a period of about twenty-five years. The names which are preceded by an asterisk (*) are those whose buildings are illustrated in this issue. The date of erection of the building follows its owner's name, and its location in every case.

HENRY M. FLAGLER.

Achelis, Fritz, New York City.
Adams, Miss Maude, New York City.
* Alcazar Hotel, St. Augustine, Fla., 1888.
Alexander, J. H., Elizabeth, N. J.
*Alpha Delta Phi Fraternity, Amherst, Mass, 1888.
Astor, John Jacob, New York City
Atlantic City Improvement, Atlantic City, N. J., 1906.

Bailey, Doctor Pearce, Katonah, N. Y.
Baker, Walter, Chicago, Ill.
Baldwin, F. A., Tuxedo, N. Y.
Baltzell, Doctor William Hewson, Wellesley, Mass.
Bancroft, Mrs O. A., Fordham, N. Y.
Bank of Toronto, Toronto, Canada.
Bank of Toronto, Gananoque, Canada.
Bank of Toronto, Petrolia, Canada.
Bank of Toronto, West Branch, Canada.
Bank of Commerce & Industry, Mexico City, Mexico.
Barrows, Mrs. Ira, Monmouth, N. J
Beales, De Sota, Greenwich, Conn
Bell, F. A., Morristown, N. J.
Belmont, Perry, Newport, R. I.
*Benedict, E. C., Greenwich, Conn., 1891.
Benedict, F. S., Oyster Bay, N. Y.
Benedict, J. H., New York City.
Bishop, T. B., San Francisco, Cal.
*Blair, C. Ledyard, Peapack, N. J., 1898.
Blair, James A., Oyster Bay, N. Y.
*Blair & Company, New York City, 1902.
Bliss, C. N., Oceanic, N. J.
Blum, Robert, New York City.
*Borden, M. C. D. (Tomb), New York City, 1906.
Bostwick, J. H., Spring Lake, N. J.
Breese, Mrs., Aurora, Ill.
Brooklyn Presbyterian Chapel, Brooklyn, N. Y.
*Brooklyn Bridge Approach, New York City, 1906.
Brown, Doctor Dillon, New York City.
Brookside Park, Essex County, N. J.
Bull, William Lanman, New York City.
Burrill, John E., Woodlawn, N. Y.

*Carnegie Institution, Washington, D. C., 1906.
*Carnegie Branch Libraries, New York City, 1906.
Carpenter, F. W., Providence, R. I.
*Carrère, John M., White Plains, N. Y., 1905.
*Carrère, John M., New York City, 1902.
Carstairs, Mrs. M. W., Staten Island, N. Y.
Case Memorial Library, Auburn, N. Y.

Caswell, M., Narragansett Pier, R. I.
*Central Cong. Church, Providence, R. I., 1891.
Chubb, Percival, New York City.
Church of the Epiphany, New York City.
Clarke, Chas. J., Palm Beach, Fla.
*Cleveland Trust Company, Cleveland, Ohio, 1903.
Cleveland—City Planning, Cleveland, Ohio.
Clinton Club House, Livingston, N. Y
Cochran, Burke, New York City.
Collins, F. C., Staten Island, N. Y.
Commonwealth Club, Richmond, Va.
Connor, Washington, E., Seabright, N. J.
*Cornell University—Rockefeller Hall—Goldwin-Smith Hall, Ithaca, N. Y., 1903.
Craig Colony, Sonyea, N. Y.
Cricket Club, Staten Island, N. Y.
Cromwell, Frederick, New York City.
Cromwell, W. N., New York City.
Cuban Bank, Havana, Cuba.
Curtiss, Julian, Greenwich, Conn.

Daly Monument, Butte, Montana.
Dana, Charles H., Roslyn, L. I.
Davis, Charles H., Tuxedo Park, N. Y.
Dickson, James B., Yonkers, N. Y.
Dillingham, Charles B., New York City.
Dominion Bank, Windsor, Ont.
Dominion Bank, Vancouver, B. C
Dominick, C. F., New York City.
Domonick, Geo. F., Greenwich, Conn.
Downey, John, New York City.
DuBois, Arthur, Greenwich, Conn.
*Duncan, Jr., Wm. Butler, Port Washington, L. I., 1903.
*Dunham, Dr. E. K., New York City, 1898.
DuPont, Alfred I., Wilmington, Delaware.
*Duryea, Herman B., Westbury, L. I., 1903.

Earle, Edw., Narragansett Pier, R. I.
Edison Building N., New York City.
Ellis, Frank, Washington, D. C.
*Ely School, The Misses, Greenwich, Conn., 1905.
*Empire Theatre, New York City, 1903.
Ethical Culture School, New York City.

Fearing, Col. Geo. R., Newport, R. I.
*First National Bank, Paterson, N. J., 1903.
*First Church of Christ Scientist, New York City, 1903.
First Church of Christ Scientist, Philadelphia, Pa.
Fish Hamilton Park, New York City.
*Flagler, Henry M, Residence, Palm Beach, Fla., 1901.
*Flagler, Henry M., Mausoleum, St. Augustine, Fla., 1906.
Fowler, Chas. N., Elizabeth, N. J.
*Foster, Giraud, Lenox, Mass, 1897.
Freeman, F. M., Bellhaven, Conn.
*Freeman, F. P., Lakewood, N. J., 1891.
French, F. O., Tuxedo Park, N. Y.
Furniss, Miss, New York City.

*Gambrill, Mrs. Richard, Newport, R. I., 1898.
*Glazier, S. W., Elberon, N. J., 1903.
*Goodyear, Frank H., Buffalo, N. Y., 1903.
Gould, Edwin, New York City.
Greer, Bishop, New York City.
*Guggenheim, Daniel, Elberon, N. J., 1890.
*Guggenheim, Murry, Elberon, N. J., 1903.

Hammond, John H., New York City.
Hamilton College—Science Hall, Clinton, N. J.
Harbor Hill Golf Club, Staten Island, N. Y.
Harriman, Edw. H., Arden, N. Y.
Harper, J. Thorne, Atlantic City, N. J.
Harper, J. H., Cedarhurst, L. I.
Hastings, F. S., New York City.
Hastings, Geo. S., Morristown, N. J.
*Hastings, Thomas, Port Washington, L. I., 1900.
Havemeyer, H. O., New York City.
Hecker, J. V., Farmington, Conn.
*Herter, Dr. C. A., New York City, 1893.
Hess, Selmar, Seabright, N. J.
Hoadly, Mrs. Geo., New York City.
Hoagland, C. N., Atlantic City, N. J.
*Hoe, R. M., New York City, 1893.
Hoey, Fred., Redbank, N. J.
Hoffman, Charles F., New York City.
*Hoffman, F. B., New York City, 1906.
*Holly Monument, New York City, 1890.
Hopkins, Dr., Summit, N. J.
*House of Representatives, Office Building, Washington, D. C., 1905.
Hoyt, J. S., New York City.

*Jefferson Hotel, Richmond, Va., 1893.
*Jennings, Walter, Cold Spring Harbor, L. I., 1897.
Johnson, E. H., Greenwich, Conn.
Jones, Eugene, Tarrytown, N. Y.
Jones, F., Tarrytown, N. Y.

*Kahn, Otto H., Morristown, N. J., 1898.
*Kunhardt, W. B., Mausoleum New Dorp, S. I., 1896.

Ladd, I. Gifford, Providence, R. I.
*Lafayette Monument, Paris, France, 1899.
*Laurel-in-the-Pines, Lakewood, N. J., 1891.
Lawson, W. S., Bellhaven, Conn.
Lawson, W. S., Bellhaven, Conn.
*Life Building, New York City., 1893.
Litchfield Park, Ridgefield, N. Y.

Mackey, Clarence, Roslyn, N. Y.
*Mail & Express Building, New York City, 1891.
*Manhattan Bridge, No. 3, New York City, 1905.
Mayo, F. H., Richmond, Va.
*McKinley Monument, Buffalo, N. Y., 1903.
Meeker, Harry, Oceanic, N. J.
Metropolitan Museum of Art, New York City.
Metropolitan Opera House, New York City.
*Methodist Church, St. Augustine, Fla., 1887.
Meyer-Sniffin Company, New York City.
Miller, William Starr, Rhinebeck, N. Y.
Mitchell, J. A., New York City.
Moran, Charles A., New York City.
Mosle, George R., Staten Island, N. Y.
Murphy, Franklin, Newark, N. J.

Newark Presbyterian Church, Newark, N. J.
*New Theatre, New York City, 1906.
*New York Public Library, New York City, 1897.
Nichols, Mrs. Allen, East Orange, N. J.

Palmer, Senator Thomas W., Detroit, Mich.
*Pan American Exposition, plan and accessories, Buffalo, N. Y., 1901.
Parsons, William Barclay, New York City.
Parmelee, James, Painesville, Ohio.
*Paterson City Hall, Paterson, N. J., 1893.
Payne, William H., New York City.
Payne, Oliver, H., New York City.
Peace Palace at the Hague.
Peck, Norman, Greenwich, Conn.
Peck, Wallace F., New York City.
Phillips, Charles S., New Brighton, S. I.
*Pierce Building, New York City, 1891.
Pitcairn, Robert, Pittsburgh, Pa.
*Pitcairn, John, Bethayres, Pa., 1893.
Pitkin Memorial, Yale University, New Haven, Conn.
*Ponce de Leon Hotel, St. Augustine, Fla., 1887.
Portland City Hall, Portland, Maine.
Presbyterian Church, Oceanic, N. J., 1890.
Providence Congregational Church, Providence, R. I.

Rathbone, Joel, New York City.
*Richmond Borough Hall, St. George, S. I., 1903.
*Rives, George L., New York City, 1906.
Rockefeller, William, Tarrytown, N. Y.
Robinson, T. H., Morristown, N. J.
*Root, Elihu, Country House, Southampton, L. I., 1896.
*Root, Elihu, Residence, New York City, 1903.
Root, Talbot, Clifton, S. I.
Rome High School, Rome, N. Y.
Royal Alexander Theatre, Toronto, Ont.
*Royal Bank of Canada, Toronto, Ont., 1906.
Royal Bank of Canada, Winnipeg, Ont.
Royal Bank of Canada, Victoria, B. C.
Royal Bank of Canada, Alberta, Ont.
Ryan, Thomas F., New York City.

Sailors' Snug Harbor, Staten Island, N. Y.
Schirmer, George, Union Hill, N. J.,
Schiller Monument, Rochester, N. Y.
Scribner, Arthur H., Mt. Kisco, N. Y.
*Senate Office Building, Washington, D. C., 1905.
*Senff, Charles, New York City, 1900.
Shelton, Dr. George, New York City.
*Sloane, H. T., New York City, 1894.
Sloane, W. D., New York City.
Sneath, E. H., New Haven, Conn.
Stanley, William, Great Barrington, Mass.
Steers, J. R., Greenwich, Conn.
*Staten Island Ferry Terminal, St. George, S. I., 1903.
Staten Island Academy, St. George, S. I.
*St. John's Park, New York City, 1897.

*St. John the Divine, Cathedral Competition, Morningside Heights, N. Y., 1892.
*St. Louis Exposition, St. Louis, Mo., 1904.
St. Mary's Church, New York City.
St. Matthew's Church Altar.
St. Paul's Rectory, Staten Island, N. Y.
Squibb, E. R., New York City.

Tenny, C. H., Methuen, Mass.
*Thompson, L. S., Redbank, N. J., 1898.
Thompson, R. G., Brookdale, N. J.
Thompson, W. P., Roslyn, L. I.
Thompson, William B., Greystone, N. J.
Titus, O. C., Staten Island, N. Y.
Todd, James Ross, Louisville, Ky.
Toronto Terminal, Toronto, Canada.
*Townsend, Mrs. R. H., Washington, D. C., 1893.
*Traders Bank Building, Toronto, Canada, 1905.

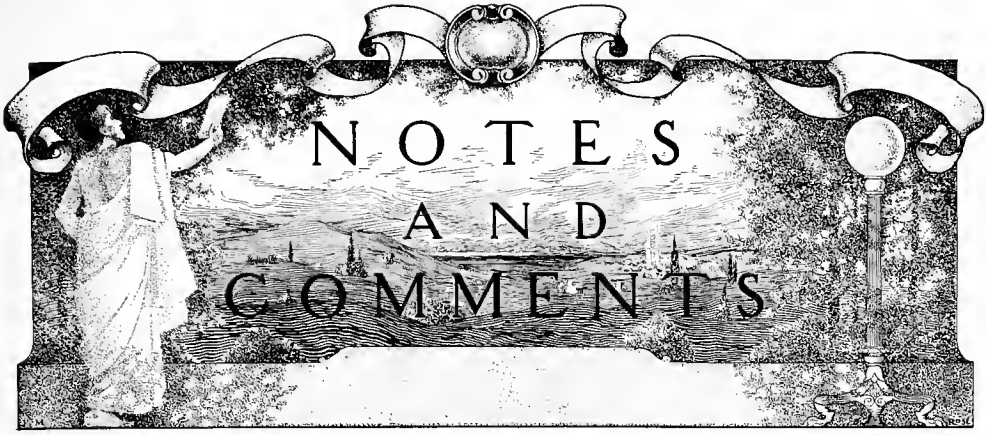
United States Capitol.
Uniontown Church, Uniontown, N. Y.
Union Station, St. Augustine, Fla.
Utica Public Library, Utica, N. Y.

Valentine, Samuel H., New York City.
Vanderbilt, George W., Clifton, S. I.
*Vanderbilt, Jr., W K., Great Neck, L. I., 1903.

Wales, Salem H., Southampton, L. I.
Warren Monument, Boston, Mass.
Waumbeck Hotel, Jefferson, N. Y.
Wellman, Francis L., New York City.
Wellesley Park, Wellesley, Mass.
Wertheim, Henri, Morristown, N. J..
*West End Chapel, New York City, 1889.
Whitney, W. C., Aiken, S. C.
Williams, Otis L., St. George, Staten Island.
Winthrop, Frederick, Boston, Mass.
Winthrop, Grenville L., Lenox, Mass.
Winthrop, Mrs. Robert, Lenox, Mass.

*Yale University, Bi-Centennial Buildings, New Haven, Conn., 1901.
*Young, Mrs. Albert, New York City, 1894.

RESIDENCE OF GEORGE L. RIVES, ESQ. (1906)—LIBRARY.



PUBLIC APPRECIATION

The memorial meeting held about a month ago in honor of the late Charles F. McKim in the auditorium of the New Theatre was a testimonial to a noble work nobly done, and it was more than that. It was an indication of the added prestige which has come to the profession of the architect through the efforts of a member of that profession whose prophetic foresight, ripe training and high ideals would have made him a conspicuous figure in any profession which he might have selected as his life work.

That McKim was really a great man there could have been left no doubt in the minds of that audience after listening to the sentiments delivered by ex-Ambassador Joseph H. Choate and Senator Elihu Root; or the more intimate addresses of Mr. Robert Peabody, of the Fine Arts Museum at Boston, or of Mr. Walter Cook, one of McKim's oldest living brother professionals. Neither could anyone who heard these speeches doubt that the profession of architecture as well as the public was a decided gainer by work of which McKim was the promoter. It was entirely unprecedented for a large audience of New Yorkers to gather for no other purpose than to hear sung the praises of a departed architect. Be it understood, that audience which wended its way through a disagreeable raw and rainy day was not one composed chiefly of brother architects. On the contrary, it was a very representative audience of individuals of many interests whose bond of sympathy was an interest in American art and architecture. It was indeed flattering to the profession as well as to the memory of McKim the growth of that interest as proved by this unprecedented occasion.

COMMERCIAL ARCHITECTURE AND UTILITARIAN CLIENTS

It has of late been often remarked in the proceedings of architectural bodies and in the pages of the architectural press that the architect as a professional man has, up to date, attained a very indifferent standing with his clients and the public. The most frequent reason assigned for the general indifference to the architect and his work as such is the general commercial tendency of the age in which, some critics say, we are "so unfortunate" as to live. Others say that the ultimate development of the art of architecture has been reached and therefore the architect of the present must be merely a copyist if he would, in any sence, be worthy of the name artist. He must, in his feeble way, help to perpetuate the glorious past.

It occurred to the writer, while calling on a gentleman who has had extensive experience in designing commercial buildings, that there might be something of interest to the profession as well as to the public on the question of commercial architecture and utilitarian clients. In discussing the subject he found that he was not deceived.

"It seems inexplicable to me," he began, "after so many years of laboring on the problem of the commercial building here in New York and elsewhere, that architects as a class should still be so far away from what are for them the vital issues involved. The commercial building, as its name im-

plies, is, of course, first and foremost a business proposition. This is the owner's view and it should be the architect's as well if he would arrive at a conclusion satisfactory to his client and, as far as possible, to himself. To the architect, of course, the problem of commercial building means something more than merely making it pay. It means the marshalling of the great number of conditions into a smooth-running and harmonious whole. It is here that his capacity for design is tested. When it is taken into consideration how many different sets of conditions must enter his calculations and how much detailed knowledge is involved, it becomes comprehensible that an owner should be willing to believe necessary the services of an expert who is capable of making for him out of such chaos a workable machine."

"But," I interrupted, "is it not a fact that the development of architecture has ever been attended by the greater complexity of the practical conditions to be met?" Should not the architect's standing with his clients be better to-day than it ever was in olden times?

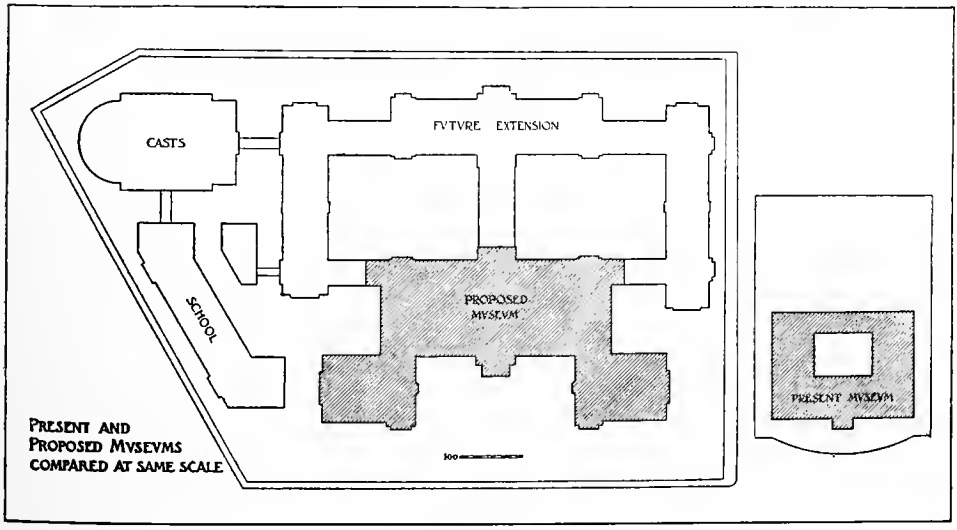
"Yes and yes, decidedly," were the answers. The story of the development of architecture from the Greek Temple to the Metropolitan Life Tower is an account of the increasing complexity of building conditions. Take for example, the transition from Greek to Roman civilization. What a revolution in the art of building it involved! And yet the Roman architects were equal to the feat required of them. We of the twentieth century have experienced greater changes since and are experiencing them every day. But are we meeting the conditions as well? And what has all this change to do with arresting the development of building as an art? One can readily sympathize, of course, with the view of some members of the profession who are so wedded to their 'art' that a sane consideration of the immediate problems pressing for solution seems to them an utter waste of effort. From what a distorted and narrow standpoint such a view must regard the problems of a modern skyscraper! And yet "pull" and political influence are supposed to account for the phenomenal prosperity of some architects and the comparative failure of others. Improper influence is, of course, at work in every field of activity and it always has been so, but a careful analysis in the case of commercial architecture at least, will convince the investigator that patronage is generally distributed with partiality only because such partiality has been honestly earned by past success."

The writer was not prepared for so frank an admission of the shortcomings of the profession from one of its oldest members, but on reflection he was able to call to mind instances of architects of the highest standing who have not proved themselves especially strong in solving the problems of commercial buildings and who, in consequence, have not been overburdened with jobs of this kind. One instance especially stands out as a good example of the fairness of things. There are several prominent banking houses and a number of office buildings in the financial district of New York which have been very widely admired for their architectural character. Inquiry of the success of these propositions as investments discloses the fact that they contain a number of vacant offices and the cause is not hard to seek; the illumination is insufficient for office purposes. The windows turned out smaller than the conditions of use warranted, although a satisfactory external architectural composition had been arrived at. The light shaft was, of course, too small and too deep to help matters much. The buildings are not suitable for their purposes and the architect cannot hope to be recommended by them for similar work in the future. Older office buildings afford instances of mistaken architectural solutions where the initial expense incurred and the character of the accommodations afforded have precluded any possibility of financial success. On the other hand, it is observable that commercial buildings which have satisfied the expectations of their owners are generally well planned and consistently designed in keeping with the funds at disposal.

It is in the field of commercial work especially that the architect can most effectively demonstrate his value as an expert, and it is in buildings of this kind that the issues involved are most clearly understood by the public. When once the architect has demonstrated to an owner's satisfaction that architectural services are valuable in that they save and make money for him, just so soon will he be willing to allow his architect a freer scope in spending money where it is impossible to show beforehand that there will result therefrom any benefit to the owner's pocketbook. Of course, an architect can obtain a client's confidence only by demonstrating to him that he is entitled to it, and the only way in which such a demonstration can be effected is by an architect's complete mastery of the thousand and one things which decide him in finally formulating his solution of the design. The evidence of such a mastery is irrefutable.

Commercial architecture holds the key

Entrance Pavillon.



Block Plan.

THE NEW MUSEUM OF ARTS.

Boston, Mass.

Guy Lowell, Architect.

Edmund M. Wheelwright, D. Despradelle, } Advisory Architects.

whereby the architect may admit himself to that professional standing to which his calling entitles him. The client will continue to be utilitarian, but what matters it so long as the architect possesses the confidence of the man for whom he is working and while he accepts and interprets his requirements is able to impose upon him the higher standards of the profession.

WHAT CITY BUILDS

At the close of the campaign, the municipaper "Philadelphia" appeared with a supplement of upwards of fifty pages, and all these pages were devoted to illustrations—two to the page—of public improvements made locally between April, 1907, and October, 1909. The first thirty pictures were of bridges and viaducts, and that was the best work shown. The next twenty-four pictures illustrated schools, completed or in process of construction. Some good work was shown, but judged by standards lately established in Chicago, St. Louis, and New York these were not notable—as many of the bridges certainly are. Views of the water filtration plant occupied the central pages, and then came about a dozen views of fire and police stations. After these were the new bath houses. The balance of the magazine was devoted to smaller parks, sewer and filtration work, and finally new hospitals. Very seldom indeed is the opportunity given thus to review pictorially the construction work done by a city through a term of months. On the whole, it may be said that the work shown seems substantial, practical, but from the point of view of architectural design quite commonplace—the bridge work being, as said, an exception. The most striking thing about the collection of pictures is its magnitude—an impressive illustration of the quantity of public improvement work which goes on quietly and in matter of fact fashion in the course of a city's normal development. The re-building of cities is in progress all the time, and the greatest builder is the city itself.

MURAL PAINTINGS IN THE WEST

There was put on exhibition last month, in the museum in City City Park in Denver, a collection of E. H. Blashfield's studies for his mural decorations, and many large photographs of the completed paintings. The incident seems to have a significance above most such exhibitions. It was arranged under the auspices of the Architects' Club of Denver—a club which, having been organized only a few weeks, thus gave immediate proof of its virility and of its probable usefulness to the community. Denver is the first city of the West to see such an exhibition. Perhaps as little as ten years ago the West would not have cared to see it, or, if seeing it, have—generally speaking—understood it. But there has lately been a rapid development of art interest in that section of the country, and within five years Minnesota, Wisconsin and Iowa have beautified their State buildings with the work of the foremost mural painters. Mr. Blashfield is himself under contract now for a large panel for the new State capitol at Pierre, S. D. The subject of the Western mural paintings are for the most part historical, and connected with the regions in which the paintings are drawn—as the discovery of the Mississippi, at St. Paul, the "Westward," at Des Moines—and thus help to at once visualize and idealize the history of the section. It can be readily believed that the exhibition, in bringing together the representations of these paintings which can be seen in the original only by those who visit the far scattered cities where they are, must be very stimulating in the West, and may in its effect prove a real art event. For mural painting, as developed with its ideal personifications, opens a new world of art, poetry and romance. In New York, Mr. Blashfield had on exhibition for a few days last month the interesting mural decoration, "Law," which is to occupy a panel above the seat of the judges in the Court House at Cleveland, of which Arnold W. Brunner is the architect.

BOSTON'S NEW MUSEUM OF FINE ARTS

There is very general praise for the new building, recently opened, of the Boston Museum of Fine Arts. Located on a site of twelve acres, on Huntington Avenue and the Fenway, it is in that new and imposing quarter of Boston where are gathered the buildings of the Harvard Medical School, the new Opera House, Simmons College, Fenway Court, Symphony Hall, etc. Though less than half the structure ultimately contemplated, it presents a façade of 500 feet on Huntington Avenue, and is of such beauty and dignity as to be free from any suggestion in its aspect of present incompleteness. The style is classical, freely interpreted, and the material is cut granite. The main entrance has triple doorways with mas-

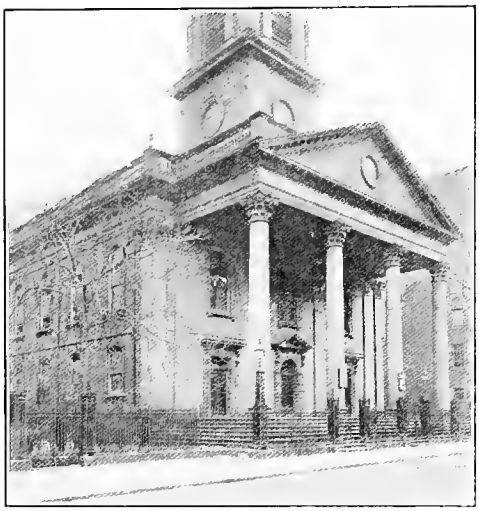
sive bronze doors, and above the entrance is a portico with four Ionic columns. This motif has been repeated in simpler form in the pavilions which advance from the wings on either side, the present building consisting of two wings and the cetnral block connecting them. It covers an area of seventy-three thousand square feet. The two projecting wings it has been, perhaps, fantastically imagined, have the effect of arms held out in invitation and welcome. At all events, there is nothing forbidding about the arrangement. As to the interior, there is ample justification, as might have been expected, for the unusual degree of serious study that was devoted to the planning and lighting of the building. Some novel ideas have been embodied. Each department is accommodated in a section that appears to be structurally separate and a complete museum in itself. The second, or main exhibition, floor contains the cream of the collection of each department—that is, it contains the objects that are most beautiful and most appeal to the general public; the floor below contains the research or study collections, more comprehensive and more compactly installed. There are seven great departments, and in each the greatest care has been taken to give the objects exhibited not only the best possible light but the most advantageous sort of background. The latter efforts have resulted in some very interesting color schemes, with various shades of gray the most common tone.

PITTSBURGH HAS AN IDEAL

The Pittsburgh Civic Commisison has issued most attractively a decorative little brochure defining its plan and scope. That the program, lists of committees, etc., should be issued in this delightfully appealing form is a thing to note. The brown cover carries the title in gilt lettering and the seal of the city in color. There are many illustrations, and every page is framed. When Pittsburgh makes up its mind to do a thing, it never wants for money. Following the title page, there comes, below a picture of old Fort Pitt, a brief definition of the purpose of the Commission. This is summed up, really, in the last lines of the definition: "to establish such living and working conditions as may set a standard for other American industrial centers." On the next page is the list of officers, and of the Advisory Board. The latter includes such men in New York as Robert W. DeForest, John M. Glenn, John W. Alexander and Seth Low; as, in Chicago, D. H. Burnham; as, in Boston, Robert A. Woods. Then are three pages of committees, covering the many phases of municipal development: Education, City Planning, Municipal Art and Design, City and District Housing, Public Hygiene and Sanitation, etc. In all there are fourteen committees, each having as chairman a member of the main Commission. The committees are to study, within their several special fields, the possibilities and needs of the city. By comparison of the progressive policies of other cities, with the advice of men of practical experience and by a grasp of actual local conditions, the committees will formulate their plans. The execution of the plans is to be secured by creating an effective and persistent public opinion in their behalf. For this purpose the Commission has created ward organizations, which will carry the plans into every local organization. The Commission announces that it deems that an expenditure of "at least $50,000 per year is necessary" for carrying on its work. The whole wonderful movement is Pittsburgh's reply to the findings of the "Pittsburgh Survey."

ST. JOHN'S CHAPEL, NEW YORK

The annual report of the American Scenic and Historic Preservation Society, which has just come from the press, says of last winter's protest against the determination of Trinity corporation to allow the destruction of old St. John's Chapel, that the protest, temporarily successful, was one "which has not been paralleled in both kind and extent within the memory of the present generation." It adds: "If anyone ever thought that the people of New York 'lacked historical imagination,' as has been charged, the popular demand for the preservation of this century-old building was enough to disprove it." The Society took the same position regarding this venerable landmark, which is intrinsically valuable as a fine specimen of church architecture, that it had taken with regard to the preservation of the beautiful old First Presbyterian Church. This is the plea that in the ever changing metropolis the people must look to the churches and cognate institutions for their landmarks and evidences of stability. "Business structures and apartment houses rise and disappear in a generation under the exigencies of the city's growth. There is little permanence upon which to fasten one's memories, affections and historical traditions. The city needs just such piles as old



The Portico of St. John's (1803).
John McComb, Architect.

St. John's." The plans for the chapel, which are believed to have been made by John and Isaac McComb, were adopted by the vestry May 12, 1803. The building was begun that year and completed in 1807 at a cost of $172,833.64, which, as the Society's report truly says, "was considered enormous at that time." The foundations, portico, front and tower are built of red sandstone, and the walls of rough hewn, grayish native stone "of the island apparently," stuccoed. Its style answers to the general term Georgian, but is more massive and ornate than St. Paul's. Shorn of its former beautiful and open surroundings, it is now "pent up between big buildings on the north and south, while its front steps are only fifty-seven feet from the freight depot across Varick Street an the west, and its rear wall is only twenty-four feet from the front wall of the buildings across St. John Street on the east."

THE BOSTON EXPOSITION

In spite of the short time which was allowed for preparation, the Boston-1915 Exposition proved as big and as interesting as its friends predicted that it would—which is to say that, while not absolutely ideal in its ordination, it was the biggest and most interesting exposition of its kind that any city has ever held, fully justifying the phrase in the advertisements, "See Boston as you never knew it." It was open for the whole month of November in the old Fine Arts Museum on Copley Square, and between the exhibits and the attending crowds there was not an inch of room to spare. The Boston "Transcript," which had shown a marked lack of enthusiasm before the exposition opened, said after it closed: "It won its way to the public heart by sheer dint of 'service' and sincerity. It opened the eyes of the people to both the riches and the shortcomings of our every day life. . . . . The pace set for us was seen in the ideal pictures of the new Chicago, promised by the movement in progress there, and in the groundplan of the new Kingsway in London." If the exposition did this, it certainly served its purpose, and it is most interesting to know that by means of an admission fee it paid its way in so-doing. The catalogue was not only complete and extensive, but appropriately of educational value. This is because it contained, as introductory to the list of exhibits in each department, a competently written, signed, and popularly informing article on what that department stood for. Thus there is first an article entitled "What City Planning Means," by Frederick Law Olmsted. The catalogue of exhibits of Public Buildings, arranged by the Boston Architectural Club, is introduced by an article on the subject of their location by Robert P. Bellows. Philip Cabot writes the article introducing the list of exhibits of Housing; Herbert J. Kellaway that introducing the list of exhibits of parks and playgrounds. On railways, docks and highways, Arthur A. Shurtleff was the writer. Just as the exposition opened, Dr. Hegemenn, a young German who had been assisting in its preparation, was called back to Berlin to help prepare a municipal exhibition to be held there next summer. So extends the practice of holding municipal exhibits.

PLEA FOR HARMONIOUS BUILDING

In the review of Raymond Unwin's book on Town Planning,* which was printed in this magazine last month, the English author was quoted as advocating the enforcement of regulations requiring the use in construction work of certain materials in certain streets, fixing definite roof lines, angles, etc. The idea will seem fantastic to a good many

*Town Planning in Practice, Raymond Unwin, A. R. I. B. A. Publisher: T. Fisher Unwin, Adelphi Terrace, London.

Americans, though his argument is unanswerable: "If we are to have beauty of surroundings—and for what does the profession of architecture exist if it is not to produce beautiful surroundings?—we must set our faces against the development of such incongruities in our buildings as completely destroy the harmony of our street pictures." Now it is interesting, on top of this plea, to come across a little article published in a neighborhood paper two or three weeks before Unwin's book appeared, in which Claude Bragdon, one of the most thoughtful and interesting of our own younger architects, makes an exactly similar plea. Mr. Bragdon says in the course of his article in "The Pinnacle," paper which represents a small residential section in Rochester—indeed, his paper is entitled, "Ideals for the Architecture of the Fourteenth Ward," that there are three things to be striven for, in securing beauty for a street: "First, unity of style. Widely divergent types of houses should not be built in juxtaposition, as one so often finds them, —pillared portico check by jowl with rustic piazza. Second, similarity of materials. Brick, frame, and plaster houses, indiscriminately interspersed make a street resemble a suit of clothes in which coat, vest and trousers are cut from different kinds of cloth. Third, harmony of color. The colors of adjacent houses should be, not necessarily the same (though that is often pleasing, too) but harmonious with one another. It is further desirable that there be no marked differences of level in water-table, cornice and roof lines, in order that the eye may be led without interruption down the vista of the street." This is going quite as far as Mr. Unwin ventures. Most interesting, too, is Mr. Bragdon's suggestion that in this matter we may gain a hint from certain streets in such old towns as Salem, Portsmouth and Annapolis, that are "unsurpassed for beauty of general effect" notwithstanding all the money which is nowadays spent on houses and grounds. In those streets, "the houses, built at substantially one period—a period characterized by taste and discretion—are individually charming, though all in the same style (the so-called colonial), and of the same material, red brick and wood, painted white." From them, he thinks, we may learn the lesson that restraint of individuality in architecture, in the interests of a general effect or impression, involves the sacrifice of but excesses and excrescences.

Some weeks after Mr. Bragdon's paper was printed, Mr. Unwin returned again to the theme in an address before the Letchworth Art Workers' Guild, which is now printed in "The City," a little monthly published at Letchworth. He notes that town planning, to have any real stability, "must be the direct outgrowth of the activities of the community who are to dwell and work in the town or suburb when built," and that there must be secured "the co-operation of the architects who may design the individual buildings of which the completed whole will be composed. From them we shall have to ask that they shall ever remember that the part is not greater than the whole. . . . During the last century architecture in this country has been, generally speaking, individual only. There has been no tradition, no conscious agreement, no regulation to co-ordinate the work of different men. Each has concentrated his attention on his own building." This is too sweeping a statement to be quite just, but it is so nearly true that it gives much point to Mr. Unwin's reply to those who say that they like "plenty of variety." "These people," says he, "seem to think that variety means mere unlikeness of several things to each other, but that is not variety at all. Variety means simply the minor changes of some fixed type. In music we speak of an air with variations. Each phrase is varied from the air; but the air, the common likeness, is greater than the differences. Variety consists of subtle changes wrought in things essentially related. Unity must dominate." Coming, further on, to concrete considerations, he says: "The element of design is especially needed in suburban streets. Too often, on the one hand, we see to-day endless monotonous rows of houses, repetitions of some unit uninteresting in itself and small in scale in relation to the street. On the other hand, we have the equally monotonous street of detached or semi-detached villas, needlessly repeated, or—and this is almost worse—each different to a degree that dissociates it from any of its neighbors. We may have scattered buildings, near enough to each other to destroy any of the ordinary beauty of the country and yet too scattered to give any sense of architectural effect or to acquire any of the beauty one associates with the town. On suburban roads the distance between the buildings in relation to their height tends to be too great, and the street pictures either represent long straight vanishing lines converging at some distant point, or a mere jumble of unrelated buildings on opposite sides of a wide road, meandering on without pro-

ducing any definite effect at all. To obtain a successful result it seems to me we must adopt the principle of grouping our buildings into larger wholes, creating larger units in the street picture." All this is certainly very interesting and suggestive, and however trite the thought may be its expression at least is comparatively novel. That it should be voiced independently but simultaneously by an architect in the United States and an architect in England, is possibly significant of its widespread pervasiveness in the profession. If that is true, results may be looked for.

LES ARCHITECTES DES CATHEDRALES GOTHIQUES*

This little book belongs to the series entitled "Les Grands Artistes-Collection d'Enseignement et de Vulgarisation," which is published under the patronage of the Administration of the Beaux-Arts. Forty-nine volumes for the lives of painters and sculptors have already appeared in this series and this is the first work to be thrown into the scales on the side of architecture. The plea of the author on behalf of the architects of history deserves more than passing consideration and in the very considerable number of sets of Artists' biographies which are now appearing on all sides, it is much to be desired that the architects should figure prominently, whereas as a matter of fact the historic architects do not figure at all.

As the author, M. Stein remarks, people have a habit of considering names. They attribute importance to personality. If no name is mentioned as author, the monument suffers, in the estimation of the man in the street. As a matter of fact the perversity of human nature has, in recent years, as regards its studies of historic art, given very over-balanced attention to painting and protests in favor of architecture are certainly in order. No doubt popular interest controls the publishers and no doubt popular interest thinks paintings more important, but popular interest is mistaken. At all events we have here in M. Stein's work an effort to restore the balance of things.

It is well known that details of the lives of the mediaeval architects are meager, but it may not be widely realized how much has been done by recent students to retrieve at least the skeleton and outline knowledge of this subject. M. Stein has properly conceived his topic as involving an ordered and scientific, though brief, account of the great French Gothic cathedrals, but in spite of the small dimensions of his book it probably furnishes the only extant compendious account and list of the architects of these buildings. Little is known about them but that little deserves all possible prominence.

The French compendiums of the general class to which this one belongs have a world-wide reputation for combining scientific method and accurate scholarship with an attractive and classic literary style and with popular quality. This book is no exception to the general rule and in view of its rather difficult subject matter may be considered one of the best of its always excellent class (in France).

*Sous-chef de Section aux Archives Nationales. 8vo. 24 ills., pp. 126. Paris, Libraire Renouard. Henri Laurens, Editeur.

SOUTHERN PENNSYLVANIA CHAPTER AMERICAN INSTITUTE OF ARCHITECTS

A charter was granted, November last, by the York County Court to the Southern Pennsylvania Chapter of the American Institute of Architects. The granting of this charter and the establishing of this chapter, which is to cover several counties of Pennsylvania, with its headquarters at York, will be of far reaching importance to the public and to the profession. The establishing of this chapter will mean a still further widening in this state of the scope and influence of the American Institute of Architects which was incorporated in the city of New York, April 13, 1857, for the purpose, as was stated in its articles of incorporation, "to elevate the architectural profession as such, and to perfect its members practically and scientifically."

The Southern Pennsylvania Chapter was organized with the following officers: John Hall Rankin of Philadelphia, president; D. Knickerbacker Boyd of Philadelphia, vice-president; B. F. Willis of York, secretary; J. A. Dempwolf of York, treasurer, and Colbert A. MacClure of Pittsburgh.

Prior to the admission of the new chapter there were two chapters in Pennsylvania; those of Philadelphia and Pittsburgh. These three chapters will now constitute the Pennsylvania State Association of Architects which was organized at Harrisburg last February.

Three Special Designs

In the Style of Louis XVI

Executed for

The New York Public Library

Messrs. Carrere & Hastings, Architects

·RVSSELL & ERWIN · MFG · CO ·

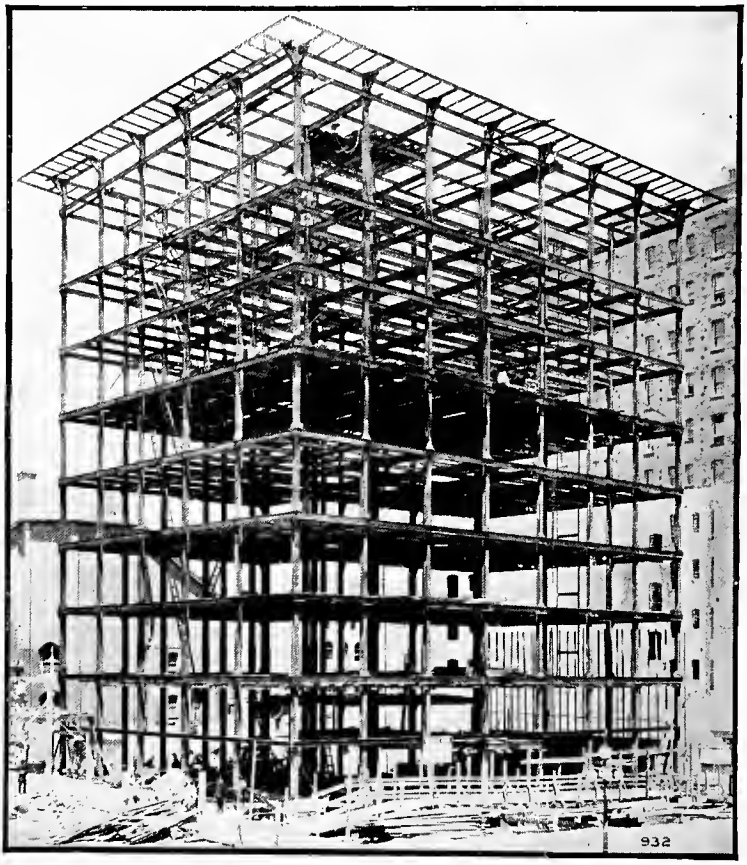
·CONTRACT · AND · ART · DEPARTMENT

· Nº · 26 · WEST · TWENTY · SIXTH · STREET ·

· NEW · YORK ·

Works at New Britain, Conn.

American Bridge Company of New York



Steel Frame of Hotel Marquise, San Francisco, Cal.

General Offices
Hudson Terminal, 30 Church St., New York

Asbestos "Century" Shingle Roof—Residence of Nathaniel Davidyan, West Moorestown, N. J. E. E. Holman, Philadelphia: J. S. Rogers Co., Stanwick, N. J., Contractors

Asbestos "Century" Shingles

"The Roof that Outlives the Building"

A house gets its market value quite as much from its appearance as from what it represents in dollars and cents. An unattractive, cheap roof knocks enough off the selling value to offset the "saving" a dozen times over.

Asbestos "Century" Shingles dress up the house, make the most of its good points, and fill the eye of the prospective purchaser. And they protect the house from fire and weather as no other roofing can.

Dense, elastic sheets of asbestos fibro-cement, formed and compacted by tremendous hydraulic pressure. Cannot decay. Improve with age and exposure. Absolutely fireproof. Three colors, numerous shapes and several sizes. Ask your Roofer for new quotations. Write for Booklet "Concrete 1910."

The Keasbey & Mattison Co.

FACTORS

Ambler, Pennsylvania

RED CEDAR

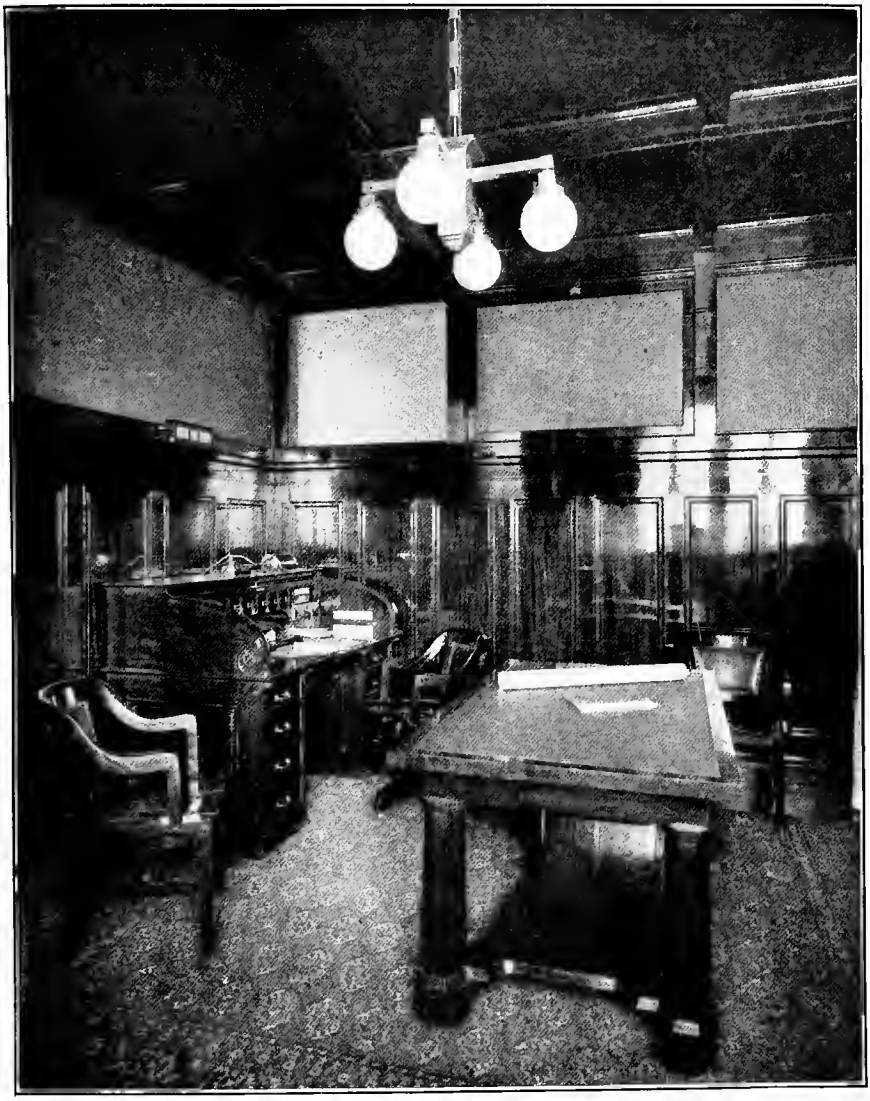
WE own and control 1,500,000 acres of Red Cedar Trees. Not the Pacific Coast Red Cedar, but the Florida variety, from which chests, closets, etc., are made. That is more than twice the size of the State of Rhode Island, and all filled with the finest growing Red Cedar Trees that have been seen since the great cedars of Lebanon.

And so, we are now in a position to offer you "Lebanon" Brand Cedar Wood free from knots and all other defects; rough and dressed boards, ceiling and dimension stock.

We invite architects and others who desire facts about the availability of Red Cedar to correspond with us.

GULF RED CEDAR COMPANY

RICHMOND, VIRGINIA



PRIVATE OFFICE, SCHICK-JOHNSON COMPANY, CHICAGO

The office shown above is finished throughout in mahogany. Note the slight percentage of increase in cost over oak or birch.

COST IN MAHOGANY	ESTIMATE IN QUARTER-SAWED OAK	ESTIMATE IN BIRCH
$1600.00	**$1500.00**	**$1450.00**

WRITE US FOR FURTHER INFORMATION

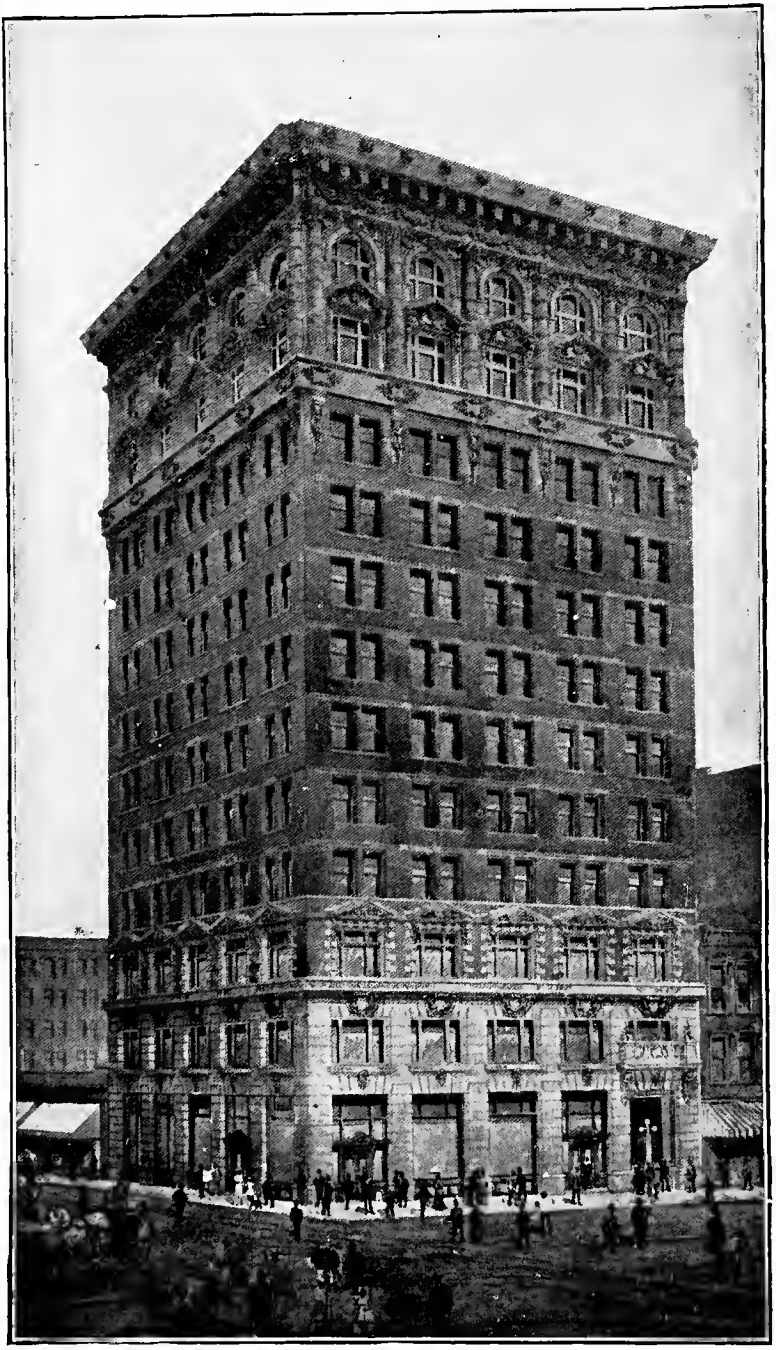
C. C. Mengel & Bro. Company

Manufacturers of Mahogany Lumber and Veneers

Louisville, Kentucky

"Thorp-Richardson" Doors

"Make Each Room a Separate Building"



UNION TRUST BLDG., LOS ANGELES, CAL. John Parkinson, Architect

800 "Thorp-Richardson" Doors and Trim-Brass Finish used throughout

Bronze and Copper Entrance Doors to Detail

A Perfect Fireproof Door for all Purposes

"A Door is Known by the Class of Buildings in which it is found"

Representatives in all Principal Cities

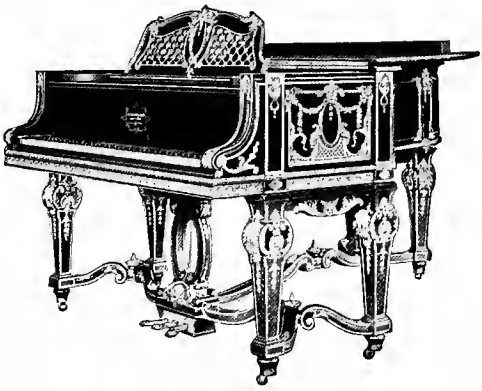
Thorp Fireproof Door Co.

Minneapolis Minn., U.S.A.

IN the designing and manufacture of Period and Art cases to harmonize with any plan of architecture or decoration, Steinway & Sons are the recognized leaders, as in all other departments of piano making—a distinction they have enjoyed for three generations. Every

STEINWAY
ART PIANO

is a true representation of its respective period—a veritable gem of beauty and perfection. A visit to the Steinway Studios will reveal that, in these masterpieces of pianocraft, music and decorative art are so deftly blended that they at once command the admiration and praise of architect, artist and connoisseur.



Steinway Partor Grand Piano in the period of Louis XIV, gilt and enameled

STEINWAY & SONS

Steinway Hall

107-109 East 14th Street, New York

(Subway Express Station at the Door)

THE KEWANEE SYSTEM OF WATER SUPPLY

Perfect Water Supply Service

The residences and bungalows illustrated on this page are provided with all the sanitary conveniences which would be possible with a good water supply service. In each, a liberal supply of running water is available at all plumbing fixtures and outside connections; and that supply has strong pressure behind it. This splendid water supply service is furnished by—

Residence of R. J. Bagby, New Haven, Mo.

The Kewanee System of Water Supply

In the Kewanee System, there is no attic or elevated tank to leak, freeze, overflow or collapse, or to mar the beauty of the scenery. Instead, a Kewanee Pneumatic Tank is placed in the ***cellar*** or buried in the ***ground.*** Water is pumped into this tank from any source of supply, with any good pumping power; and it is delivered to the fixtures by ***air pressure.***

The Kewanee System is not an experiment—there are over 10,000 of our plants in successful operation. Every Kewanee System is thoroughly guaranteed—we take all the risk and responsibility.

Residence of Gen. H. O. Corbin, D. H. Burnham Co., Architects.

Mr. R. J. Bagby, whose residence is illustrated on this page wrote: "The Kewanee System works perfectly and is satisfactory in every respect."

Rev. J. Wilbur Chapman, whose place is shown below says: "We are perfectly delighted with the Kewanee System which supplies our country house with water, and I wish again to thank you for sending me so fine an outfit."

A. B. M. Hord's compliment is this: "My Kewanee System is absolutely perfect."

Gen. H. O. Corbin said: "The Kewanee System works better than I thought possible—all like it very much."

Let us show you what we can do for ***you.*** We make no charge for our specifications and estimates. Our engineering department is at your service; and our broad practical experience will be of value to you.

Our illustrated catalogue will give you full information regarding the Kewanee System. It is free. Please mention this magazine when you write.

Kewanee Water Supply Company, Kewanee, Illinois.

1566 Hudson-Terminal Building, 50 Church Street, New York City.

1212 Marquette Building, Chicago, Illinois. **305 Diamond Bank Building, Pittsburg, Pa.**

H. N. Edwards, San Jose, Cal. *Rev. Dr. J. Wilbur, Chapman, Winona Lake, Ind.* *B. M. Hord, Nashville, Tenn.*

Three Bungalows supplied with water by Kewanee Systems

QUALITY WINS

The "Dahlstrom" Hollow Bronze, Copper and Steel Doors with Jambs and Casings are

QUALITY DOORS FOR QUALITY BUILDINGS

THEY ARE MADE of the finest materials known to modern manufacturers.

THEY ARE MADE in a factory containing one-eighth of a million square feet of floor space and equipped with special machinery of every kind to make them the BEST DOORS IT IS POSSIBLE TO PRODUCE.

THEY ARE MADE by the most skilled mechanics it is possible to procure.

THEY ARE FINISHED by men taught from boyhood in the art of graining and enameling, and the material, as it reaches the building which is to receive it, presents a finished appearance equal to the rarest woods, with the added advantage that this finish is practically indestructible.

THEY ARE USED wherever the BEST can be afforded.

DAHLSTROM DOORS

ARE

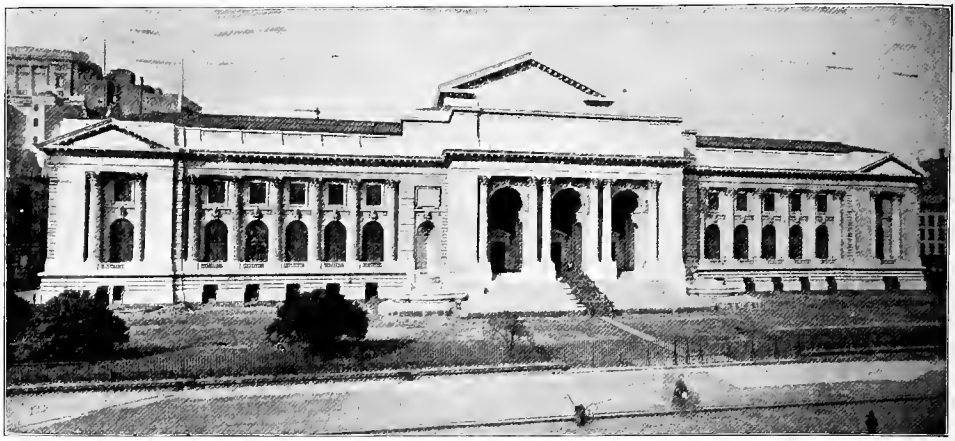
FIREPROOF WEATHERPROOF

REPAIRPROOF

MANUFACTURED BY

DAHLSTROM METALLIC DOOR CO.

Executive Offices and Works, Jamestown, N. Y.



NEW YORK PUBLIC LIBRARY

Messrs. Carrere & Hastings, Architects — The Norcross Brothers Co., Builders

Norcross-West Marble Company

Dorset White *and* Plateau White Marble

Quarries: DORSET, VT. Mills: MANCHESTER, VT.

Offices: WORCESTER, MASS., and DORSET, VT.

The marble, both exterior and interior, for the NEW YORK PUBLIC LIBRARY was taken from our Quarries

The Norcross Brothers Co.

General Contractors and Builders

160 Fifth Avenue, New York

OFFICES

Tremont Bldg., BOSTON, MASS. Colorado Bldg., WASHINGTON, D. C.

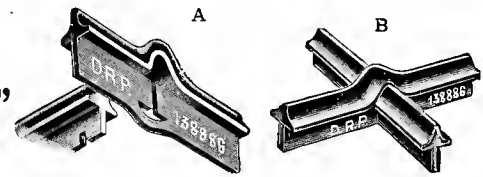
Industrial Bldg., PROVIDENCE, R. I.

WORCESTER, MASS.

Daylight for Factories

We are now placing on the market four complete types of standard window sash in

Wrought Steel "Detroit Fenestra"



(Note: Finished Joint "B")

viz.:

Type "A" in 21 sizes and degrees of ventilation, 10" x 16" glass
Type "B" in 21 sizes and degrees of ventilation, 12" x 18" glass
Type "C" in 6 sizes, 12" x 18" glass, large ventilation
Type "M" in 2 sizes, 12" x 18" Ventilated Monitor Sash

All these standards are made as interchangeable units, and mullions are supplied where they are to be used in combination

Immediate shipments are insured when openings are planned to take standards

Send for our new Pamphlet "Y," containing full details and dimensions of these standards, with instructions for erecting and glazing.

For Factories, Warehouses, Mills, Car Shops, Power Stations Garages, Institutions and All Industrial Buildings

---

RECENT INSTALLATIONS OF THIS MATERIAL:

Indiana Steel Co. (U. S. Steel Corporation), Gary, Indiana.
Jenks & Muir Mfg. Co., Detroit, Mich.
Reinforced Concrete Pipe Co., Detroit, Mich.
Allyne Brass Foundry Co., Cleveland, Ohio.
Mitchell Motor Car Co., Racine, Wis.
Western Motor Company, Marion, Ind.
Carnegie Steel Co., Bellaire, Ohio.
Michigan Alkali Co., Wyandotte, Mich.
American Optical Company, Southbridge, Mass.
Pennsylvania Railroad Co., Philadelphia, Pa.
American Sterilizer Company, Erie, Pa.
Bethlehem Foundry & Machine Co., Bethlehem, Pa.
El Paso Power Station, El Paso, Texas.
C. T. Patterson Warehouse, New Orleans, La.
Holophane Glass Co., Newark, Ohio.
New York Central & Hudson River Car Shops, West Albany, N. Y.

Detroit Steel Products Company, Mfrs.

Detroit, U. S. A.

Metropolitan Life Bldg.

J. W. RAPP Co.

Showrooms and Offices:

Metropolitan Life Building : : 1 Madison Avenue, New York

Doors, Windows

AND

Trim

IN

HOLLOW STEEL

AND

BRONZE

Fifth Ave. Bldg.

THE L. SCHREIBER & SONS Co

ORNAMENTAL IRON & BRONZE STRVCTVRAL STEEL

CINCINNATI

BRANCH OFFICES:

1133 BROADWAY, NEW YORK

WASHINGTON, D. C.
PITTSBURG CHICAGO ST. LOUIS
DENVER SAN FRANCISCO
FT. WORTH NEW ORLEANS ATLANTA
RICHMOND

UNION TRUST BUILDING, CINCINNATI, OHIO.
D. H. Burnham & Co., Architects.

No one knows better than big architects—the men who plan and superintend the construction of the great modern buildings—the superiority of red lead as the preserver of the steel skeletons of these immense structures.

And they are the ones who use it.

If you are interested in steel-framed buildings read "How to Protect Structural Metal," the latest work on the subject. Free to architects on request.

SPECIAL NOTICE: Our white lead in our new steel kegs may be expected to appear on jobs from now on. The package will be unfamiliar to inspectors for a while, but the Dutch Boy Painter trademark on the side of the keg will be the guaranty as before.

National Lead Company

New York Boston Buffalo Chicago Cincinnati
Cleveland St. Louis

(John T. Lewis & Bros. Co., Philadelphia)
(National Lead & Oil Co., Pittsburgh)

Ours is an absolute SCIENCE.

It permits of no chance-medley of compounds. It prevents the use of ingredients of untested quality—it eliminates haphazard guessing as to quantities.

It took years of experience and experiment to bring our formulae to their present state of perfection. Never will we chance their efficiency.

Exacting science guards them against laxness of quality—it protects them against non-uniformity.

Bridgeport Standard Wood Finishes

always have and always will give the most satisfactory results—yesterday, today, tomorrow.

They develop the natural beauty of the wood without raising, obscuring or clouding the grain.

They give an elastic, tough finish that insures permanence of beauty — wonderful durability.

Leading architects, contractors and furniture, piano and car manufacturers have used them for years—because they are practical, easy to apply, economical and of uniform best quality. Let us prove them to you.

WRITE FOR SAMPLE PANELS

We will be very glad to mail you on request a series of sample panels showing numerous wood finishes in new and staple effects. You will find them useful and *practical*.

Address Dept. J-1

THE BRIDGEPORT CO.
WOOD FINISHING
NEW MILFORD CONN.
NEW YORK · CHICAGO · PHILADELPHIA · BOSTON

FOX'S WATER PAINT

PERMANITE

FOR WHITENING

coloring and fire-proofing walls, ceilings, beams, etc., of factories, mills, warehouses, sheds, garages and light-shafts.

Almost as cheap as whitewash and as durable as oil paint.

ABSOLUTELY RELIABLE

M. Ewing Fox & Co.

SOLE MANUFACTURERS

136th Street and Rider Avenue, New York
107 East Lake Street, Chicago

M. P. DURABLE
INTERIOR VARNISH

is for use upon natural finished, painted or grained floors. In point of durability and appearance it cannot be excelled. It does not mar nor scratch white. It is pale in color and successfully withstands the hard usage to which a floor varnish is subjected.

Used by the Best Painters Everywhere
List Price, $2.50 per Gallon

We will appreciate your specifications of this material, and we agree to follow up the work to insure its use.

We refer you to Sweet's Index, pages 1276-1277.

THE GLIDDEN VARNISH COMPANY
Makers of High Grade Varnishes for all purposes
Glidden Bldg., Cleveland, Ohio

GLIDDEN'S
GREEN LABEL VARNISHES

SPECIFY

CARTER WHITE LEAD

IT is not sufficient merely to specify "Pure White Lead." There are kegs of so called white lead on the market with a label like this: "We guarantee the white lead in this package to be perfectly pure," and the maker has forgotten to give his name and address. He has forgotten also to put in all white lead—two-thirds or more of the contents is silica, barytes, or worse.

Architects who have specified Carter White Lead for years, know by experience that its purity and *extreme whiteness* are not merely features of the label, but of every ounce of the lead itself. Not an ounce of adulteration was ever put into Carter White Lead—not an ounce ever will be.

Specify "CARTER" for your own protection—see that the contractor uses Carter as specified.

Every architect should possess a copy of our practical paint book, "*Pure Paint,*" with a set of modern color plates. The booklet gives much valuable information on the paint subject and the color schemes will be helpful in designating color combinations to clients.

Carter White Lead Company

W. P. Station 101 Factories: Chicago, Omaha **Chicago, Illinois**

WAREHOUSES IN ALL PRINCIPAL CITIES

H. L. BOUGHTON & CO.

Invite attention to the finished interiors of the residence of Mr. George L. Rives, No. 69 East 79th Street, which were executed by them.

320 Fifth Avenue
New York

Woodworking Factory
276-280 Ninth Ave.

E. A. STEVENS F. S. TAINTER

E. A. Stevens & Co.

ENGINEERS

Number One Newark Street, Hoboken, N. J.

Hydraulic and Hydro-Electric Work a Specialty

Mr. Tainter acted as Engineer in charge of entire work, including Hydraulic Installation, for Mr. C. Ledyard Blair

WILSON G. CORNELL
PRESIDENT

EDWARD SLOSSON
VICE-PRESIDENT

GEORGE W. SIMMONS
SECY. AND TREAS.

W. G. Cornell Company

ENGINEERS & CONTRACTORS

HEATING

PLUMBING LIGHTING

TELEPHONES STUYVESANT 460 461 462

EVERETT BUILDING
UNION SQUARE
NEW YORK

BOSTON OFFICE
46 CORNHILL

We offer to the owner, architect and builder the facilities and services of an organization capable of installing the complete mechanical equipment of any building

LARGE AND RAPID INSTALLATIONS A SPECIALTY

Matheson Pure White Lead

IN STEEL PACKAGES

RECOGNIZING the superiority of steel over either wood or tin packages for White Lead, we are now prepared to furnish MATHESON STRICTLY PURE WHITE LEAD, in all sizes from 12½s to 100s, in the Steel Packages illustrated above.

Steel packages do not absorb oil, and White Lead therefore keeps in perfect condition for any length of time, and there is no waste from lead adhering to the package or loss of oil by absorption.

The 12½, 25 and 50-pound buckets make most convenient paint pots, the inside being smooth from top to bottom, so that the entire contents can be used and the pot perfectly cleaned.

Matheson White Lead is superior to any other White Lead on the American market in whiteness, fineness, covering power and durability, and can be specified by architects with perfect assurance that it will prove satisfactory to their clients and creditable to themselves.

MATHESON LEAD COMPANY

NEW YORK

THE PEELLE DOOR DID IT

PREVENTED FIRE FROM ENTERING ELEVATOR HATCHWAY

FURNITURE WAREHOUSE

Photograph illustrates how the "PEELLE" Doors withstood the extreme heat. View taken at hottest point of fire.

Write for information

THE PEELLE CO., 123 Liberty Street, New York City

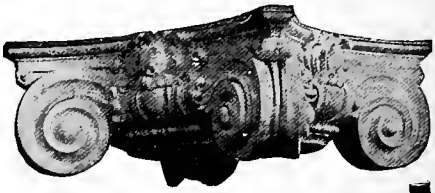
Beautiful Effects

can be obtained by using our line of plastic and wood ornaments.

The rich designs and modern styles listed in our four catalogs (free on request) enable contractors to treat interior and exterior work with best results.

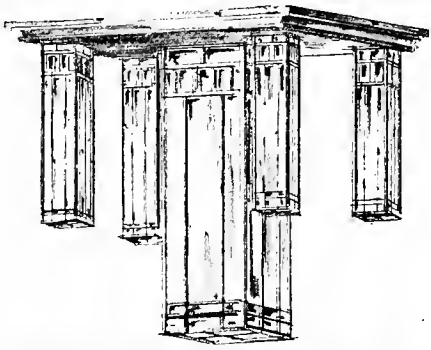
We have the variety, you know. A style, material and price for every purpose.

Send for information and the four big books.



The Decorators' Supply Company

Archer Avenue and Leo Street CHICAGO



Individuality

This simple ceiling light has been carried out in very charming variations, making an excellent light where effect is of most importance. The glass is set in bronze metal bars.

Special booklet for lighting suggestions mailed to architects or decorators upon request

Victor S. Pearlman & Co.

Pullman Bldg., 12 E. Adams St., Chicago

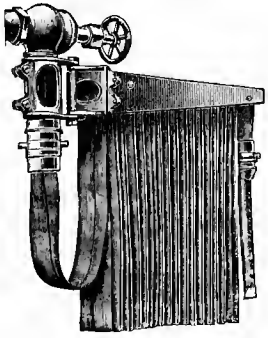
An example of Art Metal Bronze for Counting Room Equipment. Treasurer's Office, Court House, Syracuse, N. Y. Archimedes Russell, Architect

ART METAL BRONZE

FOR BANKS
COUNTING ROOMS
PUBLIC OFFICES
COUNTY and MUNICIPAL BUILDINGS

ART METAL Construction Co.

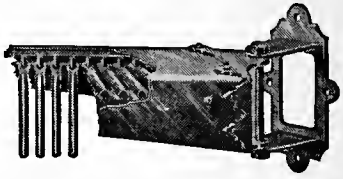
Jamestown, N. Y.



The "ROYAL" Pressed Metal HOSE RACK

SURE IN OPERATION
HOSE UNDER COVER
ATTACHED PINS

Made of PRESSED STEEL and MALLEABLE IRON



Can be attached to wall, to stand pipe, or by means of nipple direct to valve.

Wirt & Knox Mfg. Co., 20-24 No. 4th St., Phila., Pa.

Catalogue on Request

LINCRUSTA-WALTON

SOLID RELIEF DECORATION

Dados, Friezes
Ornaments & Panels
In Any Color
For Dining Rooms
Halls, Hotels,
Offices
Club Houses
Yachts, Churches
Used by all
Principal Dealers
Throughout the
United States

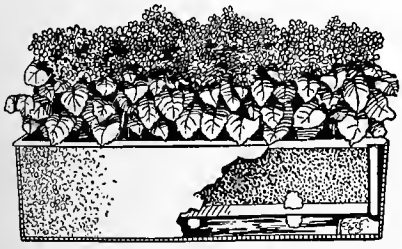
FR. BECK & CO.
7TH AVE & 29TH ST. New York

Ever Green Decorations

The continual dripping of water from newly watered plants on window sills is a thing of the past.

The Illinois Self-Watering Non-Leakable Flower Boxes are made from the best galvanized iron or copper and are guaranteed not to leak. The effect of these Boxes, wherever exposed, makes a plain house or building look beautiful and artistic.

Architects are especially requested to send us designs to harmonize with surroundings. Water applied every two or three weeks.



Pat. Jan. 29, '07

Illinois Heater and Mfg. Co.

32 Dearborn St., Chicago

Rugs Made to Order

in co-operation with architects and decorators

A few of
CARRERE & HASTINGS
Buildings in which
our rugs are used:

C. Ledyard Blair,	Res.
Chas. F. Hoffman,	Res.
Murray Guggenheim,	Res.
F. H. Goodyear,	Res.
First Church Christ Scientist	
Blair Building,	Offices

Persian Rug Manufactory

Established 1884

900 Broadway
New York

Bronze Counter Screen for First National Bank of Oakland, Cal. L. B. Dutton, Architect

HECLA IRON WORKS

Architectural Bronze and Iron

North 10th, 11th, 12th, 13th and Berry Streets

Brooklyn, New York City

VAN DORN METAL FURNITURE

Steel and Bronze President's Chair

Made for the DIRECTORS' ROOM of the Pacific Mutual Life Insurance Company, Los Angeles, Cal.

Parkinson and Bergstrom, Architects

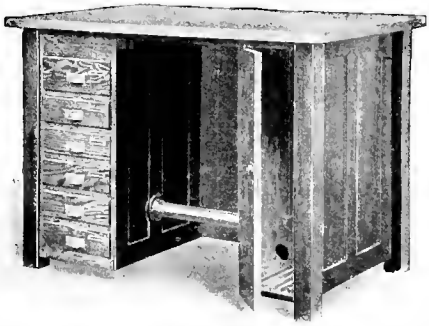
METAL DESKS, CHAIRS, FILING DEVICES, TABLES, ETC.

Built by

The Van Dorn Iron Works Co.

Metallic Furniture Dept.

2683 E. 79th Street : : Cleveland, Ohio



SPECIAL College Furniture

Special designs
Standard styles and sizes

The best of workmanship, material and finish

Economy

Furniture *excels*

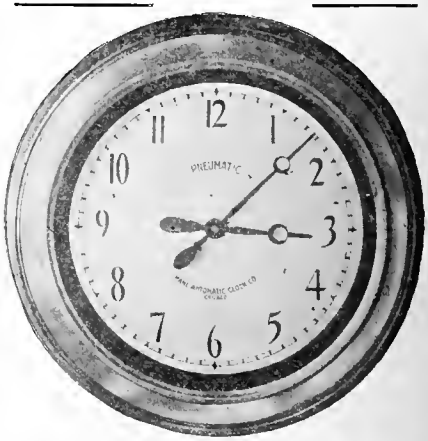
Catalogues on pages 1, 2 and 3 of Sweet's Catalogue, 1910 issue

Factory Prices

Economy Drawing Table Co.

Toledo, Ohio

ECONOMICAL **ACCURATE**



SIMPLE **RELIABLE**

Pneumatic Clock System.
Clock and Program System.

FOR ALL CLASSES OF BUILDINGS.

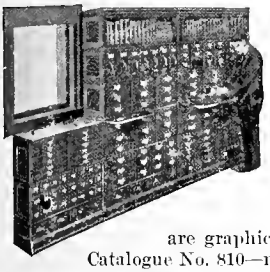
Hahl Automatic Clock Company

1507-9 N. Maplewood Ave., Chicago, Ill.
103 Park Ave., New York City

See "SWEET'S"—Page 1178

Check your Office Equipment Needs Here and Now—Prompt Deliveries Assured

Deferring the final selection of business tools your office should have as business increases, results in congestion—lost time and profits. A moment's thought on your part *now* can prevent irregularities that invariably follow delayed action. Check off this list of articles you must have—now. Learn—without cost or obligation—just how growth, efficiency and profits—in *your* business may be stimulated by suitable tools.



Globe-Wernicke Filing Cabinets In Wood and Steel

are graphically illustrated and specifically described in the pages of Catalogue No. 810—mailed free upon request. In addition to giving prices of every size, style and finish, ***sold at uniform prices, freight prepaid everywhere***—

It shows just how Globe-Wernicke Filing Cabinets in Wood and Steel will harmonize with the furnishings of your office—how you can profitably utilize unused office space—how, in Horizontal Units, Upright Units, Card Index Cabinets or Unifiles—Purchase Records, Stock Records, Inventory Sheets, Invoices, Price Lists or Letters of previous months or years can be so filed as to insure instantaneous reference at any and all times. This catalogue and a book "Finding and Filing Papers" mailed free upon request.

The Globe-Wernicke Co., Cincinnati, U. S. A.

Branch Stores: New York, 380-382 Broadway
Chicago, 224-228 Wabash Ave. Boston, 91-93 Federal St.

Tools Needed for the New Year's Business

Wood or Steel

—Vertical Letter Files
—Card Index Files
—Flat Letter Files
—Transfer Cases
—Distributor Files
—Transfer Case Units
—Catalogue Drawers
—Invoice Files
—Stock Report Files
—Daily Report Units
—Storage Files
—Pigeon Hole Units
—Cupboard Units
—Filing Cabinet Supplies

These in a wide range of styles, sizes and prices—ready for immediate delivery.

Sign the Coupon Now

Dept. U-810. Mail to address below without cost or obligation, your book illustrating and describing **Globe-Wernicke** Filing Cabinets in **Wood and Steel**, together with a copy of "Finding and Filing Papers."

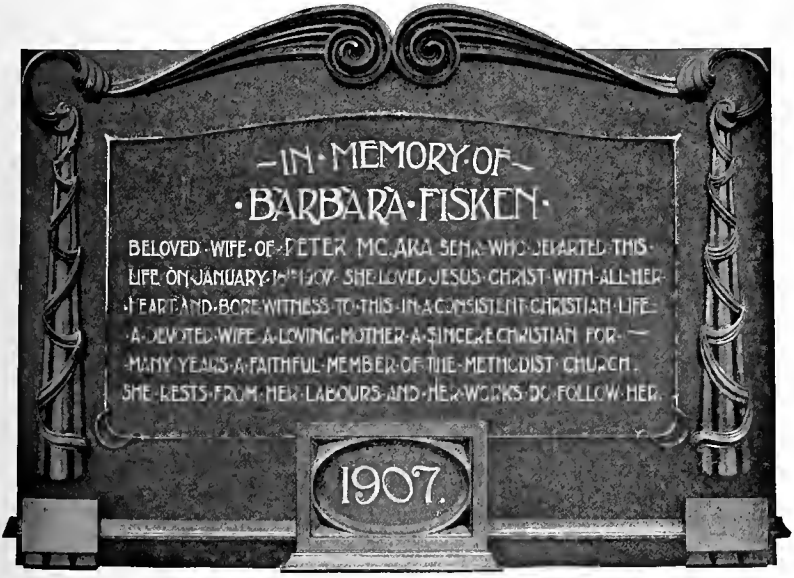
Name .....

Street .....

Town .....

State .....

The Globe-Wernicke Co., Cincinnati, U. S. A.



Ornamental Iron and Bronze

BRONZE TABLET, REGINA, SASK., CANADA
DARLING & PEARSON, Architects

Flour City Ornamental Iron Works

MINNEAPOLIS, MINN.

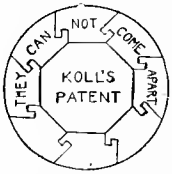
Awarded the Gold Medal at the St. Louis Exposition, 1904, for Superiority of Goods

Eureka Fire Hose Mfg. Co.

New York, N. Y.
Chicago, Ill.
Columbus, O.
Dallas, Tex.
Denver, Colo.
Boston, Mass.
Philadelphia, Pa.
Atlanta, Ga.
Minneapolis, Minn.
Seattle, Wash.
Syracuse, N. Y.

Koll's Patent Lock Joint Columns

Suitable for Pergolas, Porches or Interior Use



ARE MADE EXCLUSIVELY BY

HARTMANN-SANDERS CO.

Elston and Webster Aves., Chicago, Ill.
Eastern Office, 1123 Broadway, New York City

Send for Catalogue R40 of columns or R29 of sundials, pedestals, etc.

See "Sweet's"

JOHNSON & SHERWIN

MANUFACTURERS · OF ARCHITECTURAL WOODWORK

· PAINTING · ETC ·

287 · EAST · 137TH STREET

NEW · YORK

BORLAND BUILDING

BUILT BY

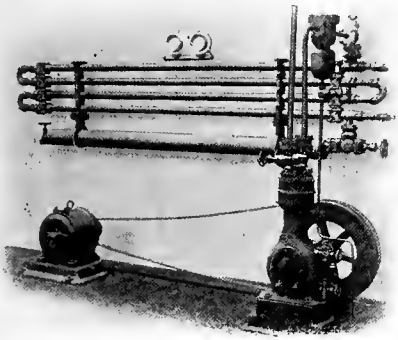
C. EVERETT CLARK COMPANY

Building Construction

Suite 1405-1406 Title & Trust Building

100 Washington Street CHICAGO

Practical Artificial Refrigeration for Private Residences



THE DIRT, inconvenience and dangers of the daily ice delivery are no longer necessary.

The Larsen-Baker ice machinery is now made in sizes which simplify the chilling of refrigerator and cooling room to the turning of an electric switch.

A machine as necessary the year around as the heating system is in winter, and less expensive both to buy and to operate.

Private residences of the better sort can add no other convenience that will prove so economical or last so long.

Perfect preservation of food and *ice of known origin* are of the utmost importance, and owners and architects interested in good homes should get facts on the cost of actual installations of *Larsen-Baker machinery* by those who have bought *and are using them.*

Write us for this data, covering installations in all parts of the country.

We believe no good home would be built without artificial refrigeration if the low cost and entire simplicity and dependability of Larsen-Baker Machines were well known.

See our catalog, pages 1080-1081 in Sweet's Catalog

Baker Ice Machine Co.

Omaha, Nebraska

Which Will You Choose?

Will it be "Just a Common Job" at small pay or one of the well paid positions which the American School of Correspondence can train you to fill?

Many poorly paid but ambitious men have over-come greater obstacles than those which confront you—have been trained by the American School to fill a good position at big pay.

It is easy to acquire training. Choose the position you desire to hold by marking and mailing the coupon below. Let us send you a complete solution of your problem.

The American School is the ***greatest practical training school*** in the world. It will come to you no matter where you live and train you in your spare time—in your own home.

Make your choice today by filling in and mailing the coupon. There is no obligation. The American School sends complete information quietly and promptly by mail—not by an agent to bother you in your home or at your work. We will tell you frankly and honestly just how we can help you. ***Mail the free information coupon today.***

American School of Correspondence

CHICAGO, U. S. A.

FREE INFORMATION COUPON

American School of Correspondence:

Please send me your Bulletin and advise me how I can qualify for position marked "X."

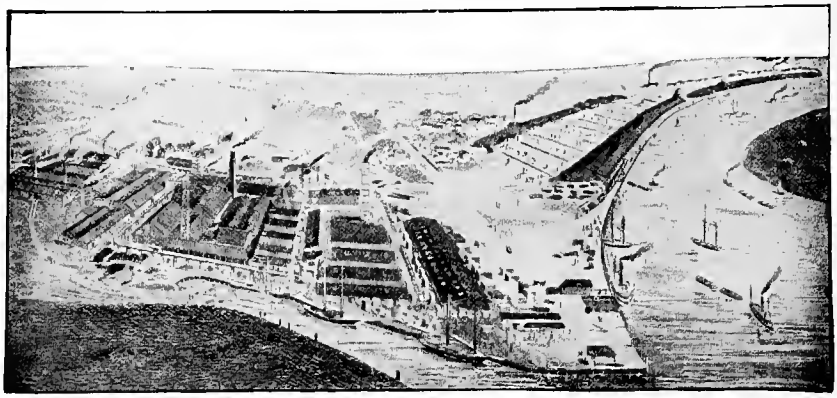
....Book-keeper	....Draftsman
....Stenographer	....Architect
....Accountant	....Civil Engineer
....Cost Accountant	....Electrical Engineer
....Systematizer	....Mechanical Engineer
....Cert'f'd Public Acc'nt	....Sanitary Engineer
....Auditor	....Steam Engineer
....Business Manager	....Fire Insurance Eng'r
....Commercial Law	....College Preparatory

NAME .....

ADDRESS .....

OCCUPATION .....

Arch. Record, 1-10 Bus.



WORKS AT SAYREVILLE, ON THE RARITAN RIVER, NEW JERSEY

SAYRE & FISHER COMPANY

Manufacturers of FINE PRESSED FRONT BRICK OF VARIOUS SHADES, PLAIN AND MOULDED SUPERIOR ENAMELED BRICK, SEVERAL COLORS · HARD BUILDING BRICK, FIRE BRICK AND HOLLOW BRICK

SEE OUR CATALOGUE IN "SWEET'S INDEX"

OFFICE, 261 BROADWAY, cor. Warren St., NEW YORK

THE AMERICAN AUDIT COMPANY

F. W. LAFRENTZ, C. P. A. President — THEO. COCHEU, Jr., C. P. A., Vice-Pres. and Secy.

A. F. LAFRENTZ, Treasurer

Expert Accountants

NEW YORK { 100 Broadway (Home Office)
33d St. and Fifth Ave. (Waldorf-Astoria)

CHICAGO—Marquette Building
BOSTON—Exchange Building
PHILADELPHIA—Bellevue-Stratford
BALTIMORE—Keyser Building
RICHMOND—Mutual Building

ATLANTA—Fourth National Bank Building
WASHINGTON, D. C.—Colorado Building
NEW ORLEANS—Hennen Building
SAN FRANCISCO—Claus Spreckels Building
LONDON, E. C.—4 King St., Cheapside

We Make a Specialty of Building and Construction Accounts

TRADE MARK

Tapestry Brick

REGISTERED IN U.S. PATENT OFFICE

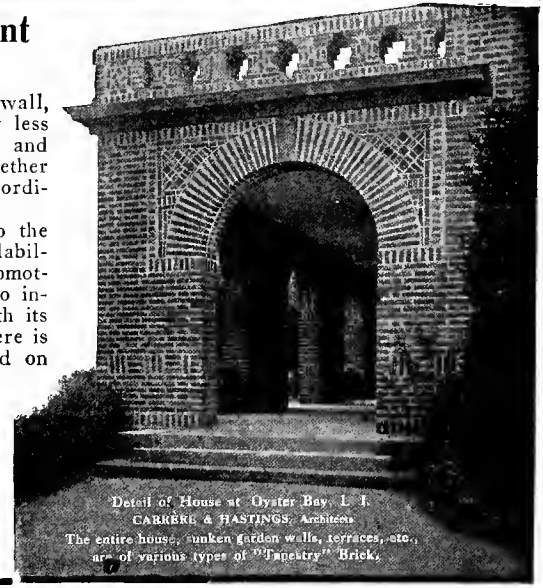
The Most Artistic and Permanent Building Material in the World

For castle or cottage, for house, stable or garden wall, it costs very little more than wood and usually less than concrete (depending somewhat on location) and is far superior and preferable to either. Altogether different in coloring, texture and hardness from ordinary face brick.

For every extra dollar, it adds ten dollars to the value of the building and vastly increases the salability of the entire property. Home builders or promoters of suburban properties are especially urged to investigate the many merits of Tapestry Brick, with its revival of the old Roman and Persian types. There is only one "Tapestry" Brick—the name is stamped on each brick.

Our valuable book, "Tapestry Brickwork," giving comparative costs of wood, concrete and brick constructions, 48 pages, 8 in colors, describing the brick architecture of all ages, full of interest to architect and home builder, sent on receipt of 20c. (less than the cost to publish). Write for information, describing the work you have in mind.

FISKE & CO., Inc.
Sole Manufacturers of Tapestry Brick
1723 Flatiron Bldg. NEW YORK
We will also direct you to the nearest building made of Tapestry Brick, for your examination



Detail of House at Oyster Bay, L. I.
CARRÈRE & HASTINGS, Architects
The entire house, sunken garden walls, terraces, etc., are of various types of "Tapestry" Brick.

"BRADFORD PRESSED BRICK"

Reg. U. S. Pat. Office, also Reg. under Laws Pa.

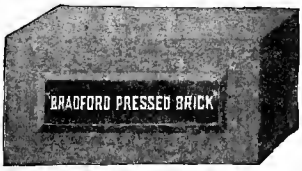
KNOWN ALSO AS

"BRADFORD REDS"

ARE MADE IN

STANDARDS, ROMANS AND ORNAMENTALS.

"BRADFORD REDS"

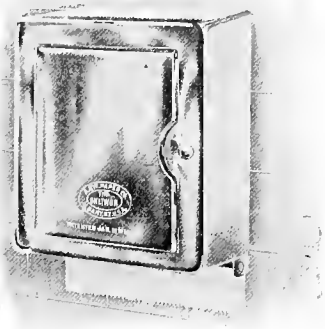


"BRADFORD REDS"

These Bricks are Famous because they have proven uniformly satisfactory—standards in quality, durability and color.

Bradford Pressed Brick Co., Bradford, Pa.

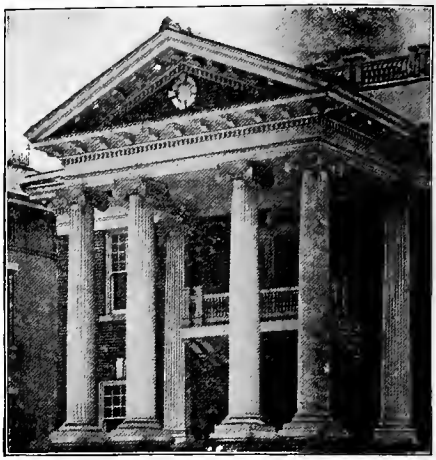
The "Onliwon"
TOILET PAPER CABINET



Delivers units of two sheets uniformly, invariably and *silently* eliminating the waste and litter incident to the unprotected roll or cabinet. Nickel plated steel *locked* cabinets for hotels or other public places. Handsomely ornamental metal for residential use.

Booklet showing SPECIAL DESIGNS FOR NEW CONSTRUCTION will be sent architects or others on application

A. P. W. Paper Co., Albany, N. Y.



The C. T. NELSON CO.

MANUFACTURERS

VERANDA COLUMNS and VERANDA WORK

MOULDINGS

WRITE FOR CATALOG

COLUMBUS, OHIO

Fine Inks and Adhesives
HIGGINS'

DRAWING INKS, ETERNAL WRITING INK, ENGROSSING INK, TAURINE MUCILAGE, PHOTO MOUNTER PASTE, DRAWING BOARD PASTE, LIQUID PASTE, OFFICE PASTE, VEGETABLE GLUE, ETC.

Are the finest and best goods of their kind

Emancipate yourself from the corrosive and ill-smelling kind and adopt the **Higgins Inks and Adhesives.** They will be a revelation to you. The Drawing Inks are the Standard of the World. Eternal Ink writes *everlastingly* black. The adhesives are clean, sweet, and remarkably efficient. For home, office, library or school, for all private and public use we guarantee them absolutely **the best.**

AT DEALERS

CHAS. M. HIGGINS & CO., Mfrs.

271 9TH STREET BROOKLYN, N. Y.

ALSO CHICAGO AND LONDON

What Press Clipping Will Do For You

In business, *as an aid in finding new markets and new outlets for your products.*

In keeping posted *on any subject under the sun in which you may be interested.*

In literary work *of whatever nature, supplying original material for lectures, addresses, debates, etc.*

ALL this we will gladly tell you just for the asking. Write us at once, stating what your business is or what you are interested in, and we will give you full information and advice as to how Press Clippings can help you and what it will cost.

The International Press Clipping Bureau receives, reads and clips fifty-five thousand publications, daily and weekly papers, monthly magazines, trade, literary and religious papers, etc. Let us show you why and how we can be of service to you at how little cost.

International Press Clipping Bureau

Dept. 103 378 Wabash Ave., Chicago, Ill.

The Eben G. Jordan Summer Home, West Manchester, Mass.
Wheelwright & Haven, Architects
NEPONSET insulates this residence

NEPONSET
Black Waterproof Building Paper

No heating plant can do its best work when a dry, wood pulp building paper is used in the walls of a house, but maximum results at a minimum cost are obtained from any heating plant when NEPONSET is used to keep out cold drafts and dampness.

NEPONSET IS *Waterproof and Airtight.*

For over twenty-five years NEPONSET has been the standard of the United States Government and leading architects everywhere. Write for "Comfortable Homes" and a brochure of designs from our recent competition.

F. W. BIRD & SON, Waterproofing Specialists

Established 1817 Main Mills and General Offices, EAST WALPOLE, MASS.

New York Chicago Washington, D. C. Portland, Oregon
Hamilton, Ont. Winnipeg, Man. St. John, N. B.

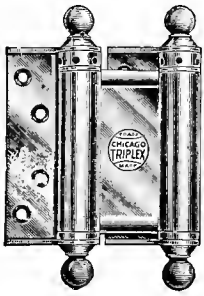
Have you seen our new PROSLATE ROOFING? It will solve your veranda roof problems

Glidden's Liquid Cement
FOR
Stucco Houses

Made in pure white, also in imitation of sandstone finish
Waterproofs, decorates and perfects stucco finish

Samples, Specifications and full information gratis upon request

A product of the
Glidden Varnish Co., of Cleveland, Ohio



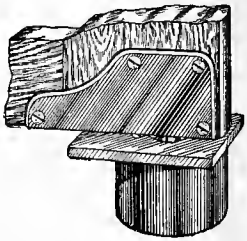
CHICAGO SPRING BUTTS

TRADE CSB CO MARK

A PRODUCT OF RECOGNIZED SUPERIORITY

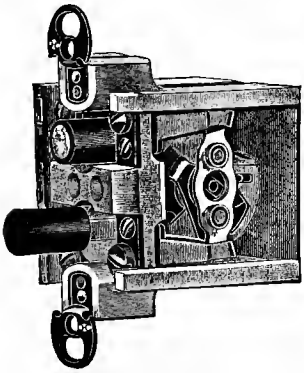
COMBINING ALL THE VALUABLE FEATURES WHICH EXPERIENCE HAS DEMONSTRATED TO BE DESIRABLE

SEND FOR CATALOGUE R26



Chicago Spring Butt Company,

CHICAGO NEW YORK



Diamond H Switches

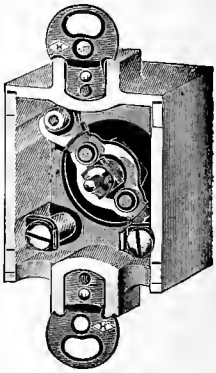
and Flush Receptacles

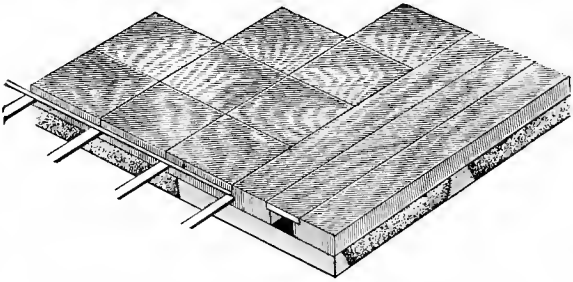
are used in the best electrical installations throughout the country. They make a good line to specify.

Made by

THE HART MFG. COMPANY

Hartford, Conn.





Showing two border wall strips with bridged over compression space and short dovetailed pieces of wood to which border strips are lightly nailed.

Steel Woven Parquetry Flooring for Fireproof Buildings

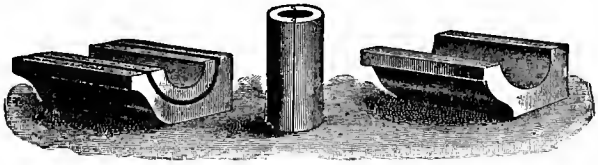
The Perfect Floor for Concrete Structures. No gumming of blocks to concrete, no imbedding of beams in the concrete. Withstood flooding during Great Baltimore Fire. Several carloads used in New York Custom House.

Wood-Mosaic Flooring & Lumber Co.

ROCHESTER, N. Y.
NEW ALBANY, IND.

CYPRESS GUTTERS

Once Used Always Used



SEND FOR CATALOG "H" AND PRICES

THE

A. T. STEARNS LUMBER CO.

Neponset, Boston, Mass.

The Ohio Elevator & Machine Co.

MANUFACTURERS OF

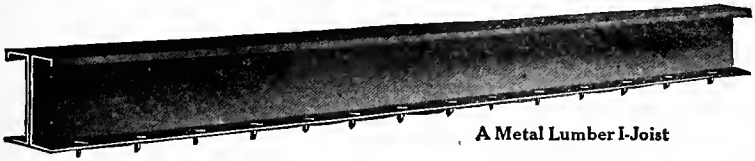
Passenger *and* Freight ELEVATORS

For every service

Electric —— Hydraulic
Belt and Hand Power

The Ohio Elevator & Machine Co.

COLUMBUS, OHIO



A Metal Lumber I-Joist

Berger's *Metal Lumber*

A Metal Lumber Dwelling in course of construction.

Special metal shapes—Joists, Channels, Angles, etc., to take the place of wood structural members in dwellings and similar structures, also for floors and partition work in larger buildings. Prongs for attaching metal lath are punched out on the members and quickly clinched over the lath with a hammer.

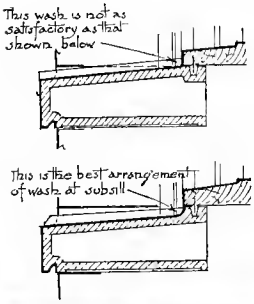
Easily and quickly erected by any good mechanic,—as quickly as wood and quicker than reinforced concrete. Cost low as compared with other types of non-combustible construction.

Write today for Catalog F-10-T

THE BERGER MFG. CO., = CANTON, OHIO

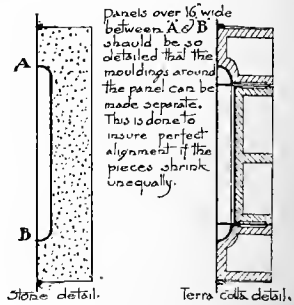
New York Boston Philadelphia Chicago St. Louis Atlanta Minneapolis San Francisco

HOW TO DETAIL TERRA COTTA



Fifty other examples of good and bad terra cotta construction will be found on pages 119–125 Sweet's Index Any architect's office

THE NORTHWESTERN TERRA COTTA COMPANY



Willson's Building Directories

THE ORIGINAL AND STANDARD
CHANGEABLE and ALPHABETICAL

Only directory that can be kept alphabetically correct and up to date in every particular. Cheapest, neatest and most convenient. Letters uniform, correctly spaced, and every name on alignment.

Adopted by the most prominent buildings

Catalogue and full particulars sent on application.

THE TABLET AND TICKET COMPANY

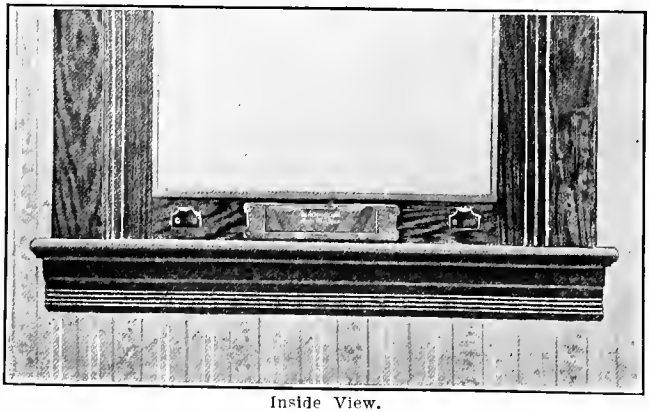
Chicago New York San Francisco, Cal.

JAPANESE GRASS CLOTH
JAPANESE BURLAPS
JAPANESE SHIKII SILKS

FOR WALL DECORATIONS
In specially selected shades and original effects
Full stock always on hand

LIONEL MOSES, *Importer*
27 East Twenty-first Street, New York

Book of samples of complete line mailed free on application. Trade Exclusively



Inside View.

The Ideal Sash Ventilator

can be used in any window sash
OLD or NEW

The cheapest, neatest and best natural ventilator on the market

Write for circulars

Recommended by doctors everywhere

The Ideal Mfg. Company
ERIE, PA.

135 Horse Power in Nash Gasoline Engines used on this estate.

Nash Gasoline Engines

Are used extensively for Electric Lighting, Water Supply and Fire Protection of Country Homes.

NASH Engines used by

C. L. BLAIR
C. H. MACKAY
PAYNE WHITNEY
Hon. J. T. DREYDEN
Hon. L. P. MORTON
J. J. ASTOR
JAMES STILLMAN
J. D. ROCKEFELLER
I. N. SELIGMAN
O. H. KAHN
WALTER JENNINGS
THOMAS F. RYAN
And many others.

Manufactured by

NATIONAL METER COMPANY

NEW YORK CHICAGO BOSTON

The New Tiffany Building, New York City
McKim, Mead & White, Architects

Covered with

MEURER'S COPPER SPANISH TILE

Weather Tight
Fireproof
Handsome
Easily and Quickly Laid
No Repairs

Features Commending our

METAL SPANISH TILE

A roof of this metal tile means complete satisfaction to the architect and owner

Made of any sheet metal desired

MEURER BROS. CO.

BROOKLYN, N. Y.

All our specialties—Charcoal Iron Roofing Tin, Metal Tile, "Unique" Metal Shingle and the "Anchor" Ventilator are described on pages 402, 403 of "Sweet's" Catalogue.

Our Lime Used in the Following Buildings

ILLUSTRATED IN THIS ISSUE

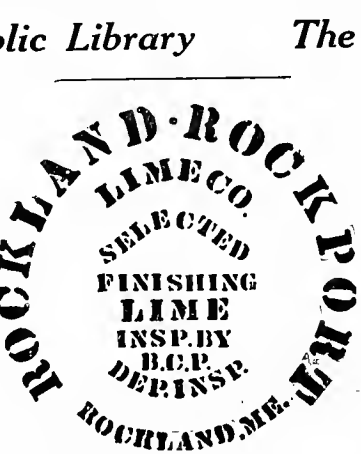
New York Public Library *The New Theatre*

Beware of Substitutes

Insist on

Rockland-Rockport Lime

If unable to obtain, notify



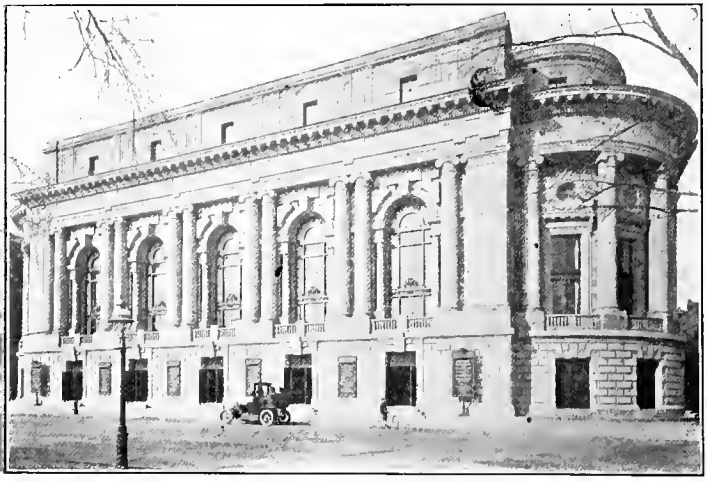
Some Dealers have a practice of sending a lime which they claim is just as good

ROCKLAND-ROCKPORT LIME CO.

FULLER BUILDING, NEW YORK

Manufacturers of The Lime of Quality.—Established over a Century

Fine Art Photography



At the suggestion of Architects and others who find it difficult to obtain the highest grade of photography, the *Architectural Record* has arranged to extend the special facilities of the Photographic Section of its Art Department to any of its clients and subscribers who may require first class architectural work. The Photographic Department (A. Patzig, Director) is equipped with the finest modern appliances and desires orders for only the very highest grade of architectural photography (exteriors and interiors). Correspondence solicited.

Architectural Record Art Dept.

11 East 24th Street New York City

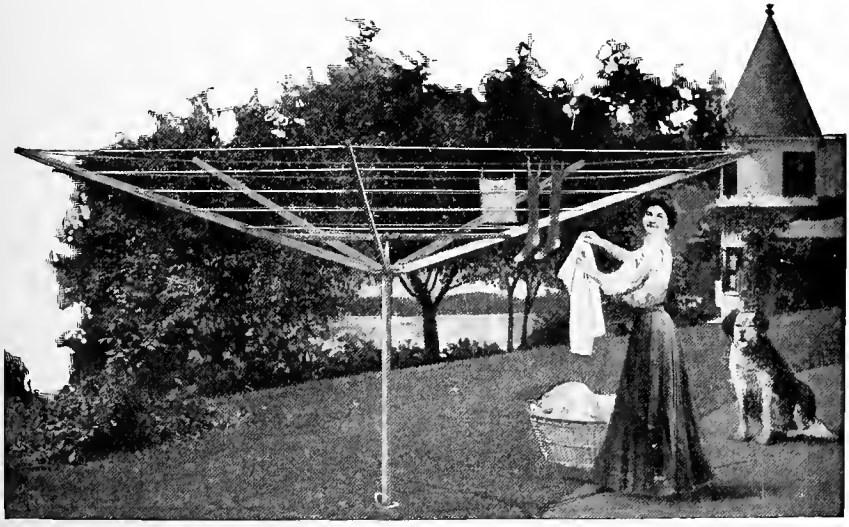
Hill's Famous Clothes Dryer

SPECIFICATIONS are never complete until the smallest of the **Details** is cared for.

One of the **Important Details—Hill's Famous Clothes Dryer.**

More necessary than the tubs in the kitchen.

SPECIFICATIONS: Written "HILL'S."
CONTRACTOR Furnishes "HILL'S."
RESULT: PLEASED CLIENT



THE MOST POPULAR LAWN CLOTHES DRYER IN THE WORLD

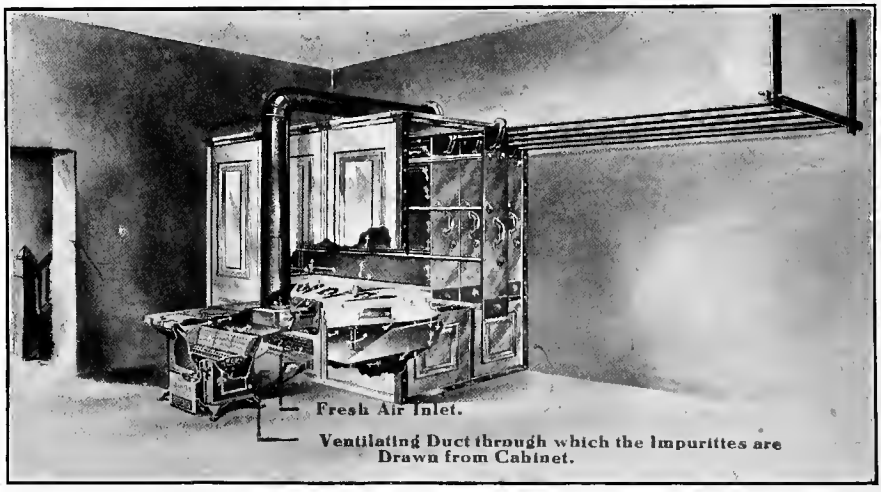
ONE MILLION HILL DRYERS IN USE

No up to date home complete without one. Looks fine on the lawn and out of sight when not in use. Write for Catalog 50

Hill Dryer Co., Worcester, Mass., **New York Office, 1133 Broadway**

The Hill-Canton Sanitary Laundry Dryer

embodies the only correct principles of heating and ventilating which should appeal to every architect and user.



SECTIONAL VIEW OF DRYING CABINET AND LAUNDRY STOVE

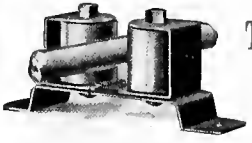
Cabinet is constructed of best galvanized metal, provided with hanging rods of galvanized wrought pipe that are rustless and will not stain or injure the clothes.

The stove used in connection is of cast iron throughout, especially constructed to heat and ventilate the Cabinet, to boil the clothes and heat the irons. It is fitted with a reversible grate, adapted to use hard or soft coal or wood. Water back furnished with stove if desired. These dryers are also equipped to be heated by steam or gas.

Made in any size desired and guaranteed satisfactory for Private Residences, Apartment Houses, Hospitals, Clubs, Hotels, Laundries, Fire Engine Houses and Institutions

The standard size Drying Cabinet is seven feet high and seven feet long. The width depends on the number of racks in Cabinet. Where standard size Dryers cannot be installed, special Cabinets are made to fit any desired space.

A special feature is Hill's Patent Adjustable Metal Ball Bearing Guide Rollers. These Guide Rollers can be found in no other make of Dryers.



Patent Guide Rollers

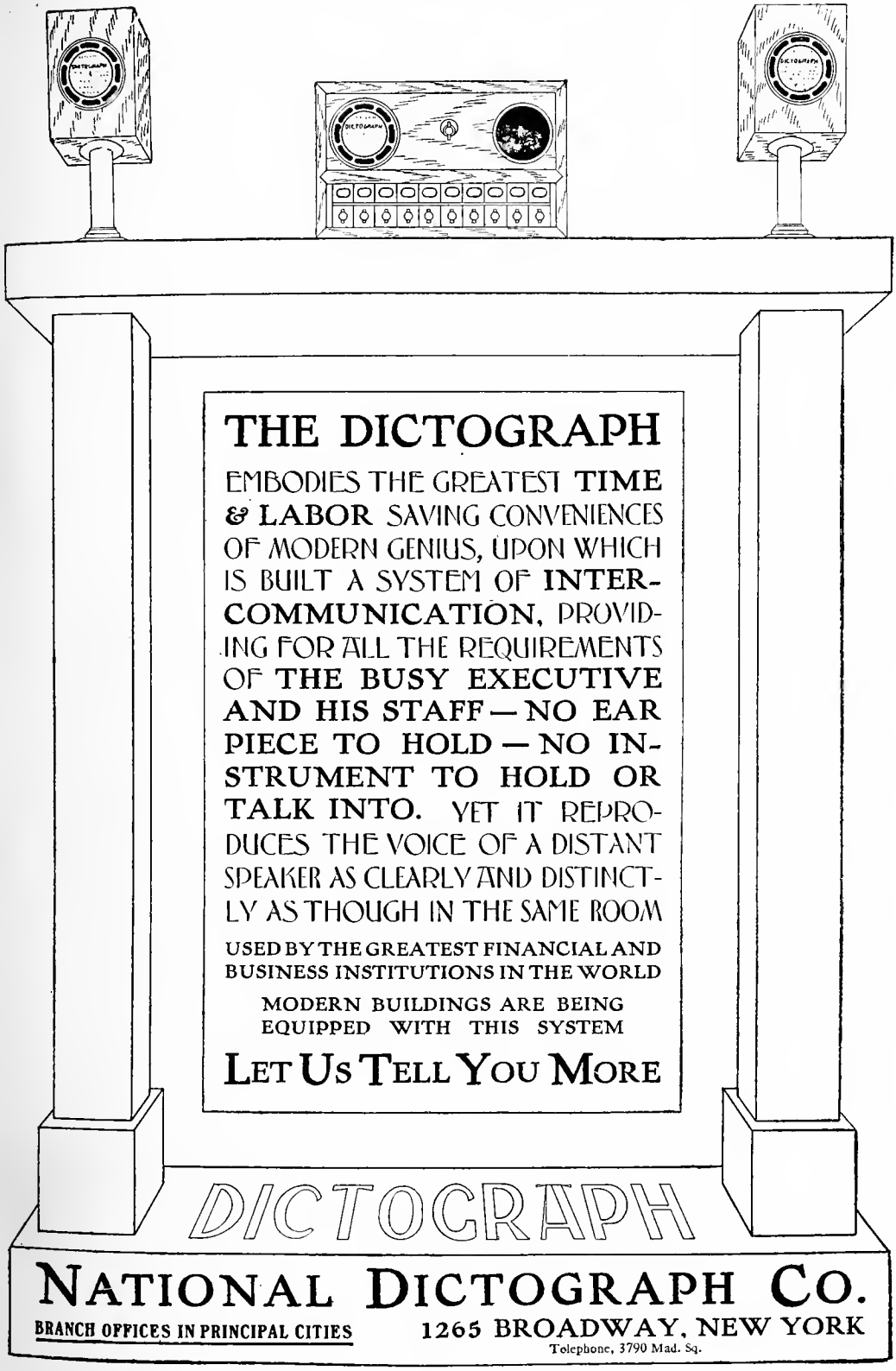
The Hill-Canton Dryer Co.

1133 Broadway, New York

Canton, Ohio **Worcester, Mass.**

Descriptive catalogue "A," explaining fully our sanitary system of heating and ventilating, mailed on request.

THE HILL-CANTON SANITARY DRYER
NEW YORK CITY.


THE DICTOGRAPH
EMBODIES THE GREATEST TIME & LABOR SAVING CONVENIENCES OF MODERN GENIUS, UPON WHICH IS BUILT A SYSTEM OF INTER-COMMUNICATION, PROVIDING FOR ALL THE REQUIREMENTS OF THE BUSY EXECUTIVE AND HIS STAFF — NO EAR PIECE TO HOLD — NO INSTRUMENT TO HOLD OR TALK INTO. YET IT REPRODUCES THE VOICE OF A DISTANT SPEAKER AS CLEARLY AND DISTINCTLY AS THOUGH IN THE SAME ROOM
USED BY THE GREATEST FINANCIAL AND BUSINESS INSTITUTIONS IN THE WORLD
MODERN BUILDINGS ARE BEING EQUIPPED WITH THIS SYSTEM
LET US TELL YOU MORE
DICTOGRAPH
NATIONAL DICTOGRAPH CO.
BRANCH OFFICES IN PRINCIPAL CITIES
1265 BROADWAY, NEW YORK
Telephone, 3790 Mad. Sq.

OTIS ELEVATORS

¶ THIS COMPANY'S DEVELOPMENT HAS BEEN CONTEMPORARY WITH AND, INDEED, COROLLARY TO THE EVOLUTION OF THE MODERN TALL BUILDING.

THE SAME INDOMITABLE SPIRIT THAT MET AND SOLVED THE HIGH SERVICE ELEVATOR PROBLEMS OF THE PAST AND MADE PRACTICALLY POSSIBLE THE TOWER BUILDINGS OF THE PRESENT SHALL ALSO MEET AND SOLVE YET MORE DIFFICULT PROBLEMS IN THE FUTURE AS THEY ARISE.

WE OFFER TO ARCHITECTS OUR UTMOST CO-OPERATION IN SOLVING ALL KINDS OF ELEVATOR PROBLEMS, AND WE ARE AT ALL TIMES READY TO PLAN SPECIAL ELEVATOR EQUIPMENT FOR ANY REQUIREMENT. WE MANUFACTURE EVERY TYPE OF ELEVATOR, FOR EVERY CHARACTER OF SERVICE—FOR EVERY KIND OF POWER.

WRITE US REGARDING THE HELP WE CAN RENDER YOU.

OTIS ELEVATOR COMPANY

OFFICES IN ALL THE PRINCIPAL CITIES IN THE WORLD

OTIS ELEVATORS

Have Been Installed in the Following Buildings of

CARRERE & HASTINGS, Architects

Ponce de Leon Hotel,
St. Augustine, Fla.
Laurel-in-the-Pines,
Lakewood, N. J.
Pierce Building,
Franklin and Hudson Sts., N. Y.
Jefferson Hotel,
Richmond, Va.
Paterson City Hall,
Paterson, N. J.
Charles F. Hoffman,
620 Fifth Avenue, N. Y.
Elihu Root,
75th St. and Park Ave., N. Y.
St. Louis Exposition,
St. Louis, Mo.
House of Representatives,
Office Building, Washington, D. C.
Senate Office Building,
Washington, D. C.
Mrs. R. H. Townsend,
Washington, D. C.
Mrs. Albert Young,
15 West 56th St., N. Y.
C. Ledyard C. Blair,
Peapack, N. J.
First Church of Christ Scientist,
96th St. and Central Park W., N. Y. City.
U. S. Custom House
(Competition Drawings), N. Y.
John H. Hammond,
9 East 91st St., N. Y.
Yale University Building,
New Naven, Conn.
Cleveland Trust Co.,
Cleveland, Ohio.
First National Bank,
Paterson, N. J.
Henry M. Flagler,
St. Augustine, Fla.
Alcazar Hotel,
St. Augustine, Fla.
Mail and Express Building,
Fulton St. and Broadway, N. Y.
Richard M. Hoe,
11 East 71st Street, N. Y.
Life Building,
17 West 31st St., N. Y.
Frank H. Goodyear,
Buffalo, N. Y.
Richmond Borough Hall,
St. George, S. I.
William K. Vanderbilt,
Great Neck, L. I.
Ely School,
Greenwich, Conn.
Traders' Bank,
Toronto, Canada.
H. T. Sloane,
18 East 68th St., N. Y.
New York Public Library,
40th to 42d St., New York City.
Dr. E. K. Durham,
35 East 68th St., New York.
Chas. N. Senff,
300 Madison Avenue, N. Y.
Henry M. Flagler,
Palm Beach, Fla.
Pan American Exposition,
Buffalo, N. Y.
Blair Building,
25 Broad St., New York.
Empire Theatre,
40th St. and Broadway, N. Y.
Carnegie Libraries (4)
New York.
New Theatre,
62d and 63d Sts., and Central Park W., New York City.
George L. Rives,
60-71 East 79th St., N. Y. City.

W. B. HIBBS & CO.'S BANK BUILDING, WASHINGTON, D. C.

Architects
Bruce Price & De Sibour, New York

Builders
Geo. A. Fuller Co., Washington

Rutland-Florence

FOWLER.

INTERIOR FEDERAL BUILDING, SEATTLE, WASH.

Producers of the Finest American Marbles for Exterior and Interior Work

Marble Company

VERMONT

¶The Brussel Method

of installing

Electrical Wiring

AND APPARATUS

secures to the owner a guarantee against any defects.

¶ We serve the Architect by carefully carrying out his specifications, or we will devise a scheme of lighting which has been successfully applied by us in many of the more important

Residences, Hotels, Libraries, Churches, Duplex Apartments or Industrial Establishments.

Can we be of service to you?

Dennis G. Brussel

15 West 29th St., New York

RIDGWAY UNITS are especially suited to Isolated Installations. They regulate closely, are highly efficient and are sparkless at all loads with fixed brushes.

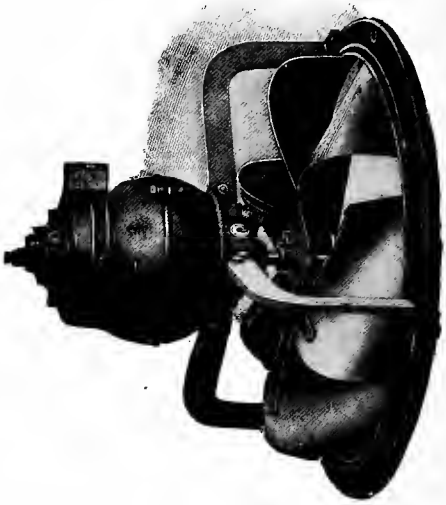
Bulletins 19, 20 and 21 R sent upon request.

Ridgway Dynamo & Engine Co.

Ridgway, Pa.

The Positive Grasp on the Air

is what has led to the immense success of



THE BLACKMAN VENTILATOR

and this success has led architects to specify over 3550 of the 9281 in use at this date.

218 are installed in the following buildings:

Hotel Astor, N. Y.
Carnegie Library, Pittsburg
Grand Central Post Office (5)
Lotus Club (4)
Bellevue Hospital (New) (3)
National City Bank (6)
Metropolitan Opera House (4)
Union Theological Seminary (3)
Union Dime Savings Bank (3)
National Park Bank (3)
Rockefeller Inst. (3)
Hebrew Infant Asylum (5)
Brooklyn Acad. of Music (10)
Met. Life Bldgs. (6)
N.Y. City Public Library (16)
Plaza Hotel (5)
Hanover National Bank (4)
New Theatre, N. Y.
St. Regis Hotel, N. Y.
Waldorf-Astoria Hotel, New York.

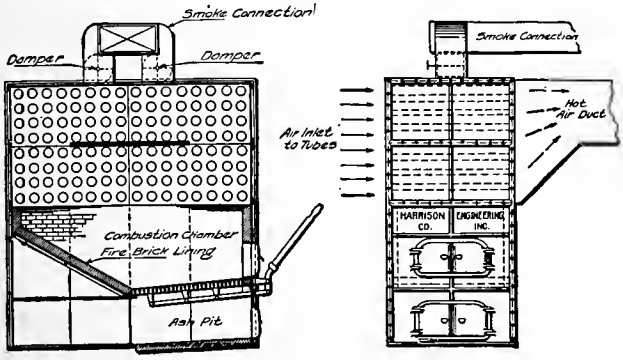
HOWARD & MORSE

45 A Fulton Street, New York

Catalog and co-operative advice on request.

Something New! Something Different!

The fan system of heating no longer requires a boiler, steam coils, traps, pumps, etc.



THE
HARRISON AIR TUBE HEATER

like a furnace, applies the heat direct to the air without water or steam. The elimination of the losses of steam apparatus and the high efficiency of the Harrison Air Tube Heater itself cuts out half of the ordinary heat waste.

It cannot blow up or freeze up

SEND FOR BOOKLET FOR NEW IDEAS ON HEATING

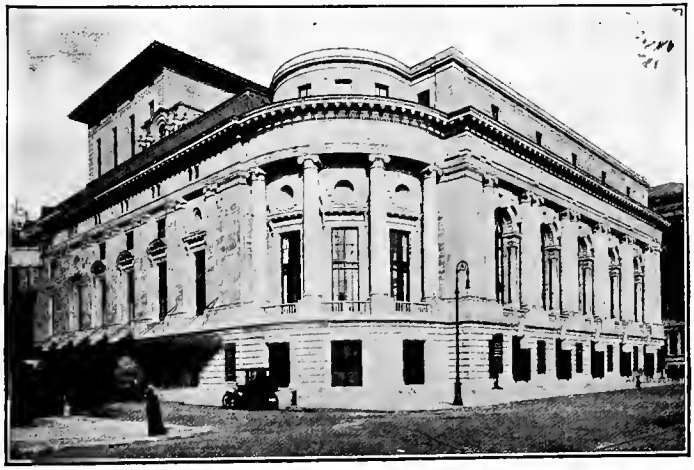
HARRISON ENGINEERING CO.

Boston, 112 Water Street
Chicago, 1209 Fisher Building

42 East 23d Street
NEW YORK CITY

22-1

The Entire Finished Floors in New Theatre
(amounting to over 150,000 sq. ft.)
installed by me



RONALD TAYLOR 520 E. 20 N.Y.
TRADE MARK

RONALD TAYLOR

520 East Twentieth Street
New York

The J. C. Vreeland Building Company

One Madison Avenue
NEW YORK CITY

Builders of Fine Residences Etc.

The following works of Carrere & Hastings built by us

Richmond Borough Hall, Staten Island
Residence Frank Ellis, Esq., Wash., D. C.
St. George Library, Staten Island
Residence Mrs. R. H. Townsend (Remodeled)
Residence Mrs. Arthur H. Scribner, Mt. Kisco, N. Y.

See page 92 this issue
See page 26 this issue

CARNEGIE INSTITUTION, WASHINGTON, D. C.

Harry Alexander

ELECTRICAL AND MECHANICAL CONTRACTING ENGINEER
HEATING, VENTILATING AND POWER PLANTS

Astor Court Building
25 W. 33D ST. & 18-20 W. 34TH ST.
NEW YORK
TEL. 6090 MURRAY HILL

Munsey Building
WASHINGTON
TEL. 7053 MAIN

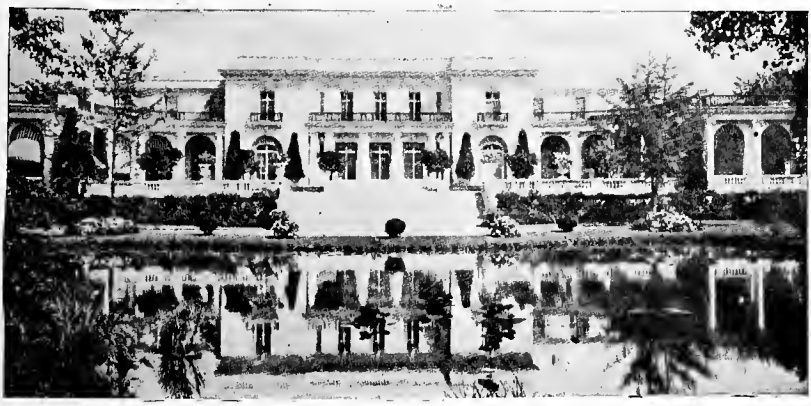
CONTRACTORS FOR THE FOLLOWING:

MURRY GUGGENHEIM HOUSE
F. H. GOODYEAR HOUSE
THOS. HASTINGS HOUSE
RICHMOND BORO HALL

ALFRED I. DUPONT HOUSE
COL. O. H. PAYNE HOUSE
EDWIN J. GOULD HOUSE

WM. K. VANDERBILT HOUSE
HON. ELIHU ROOT HOUSE
S. H. VALENTINE HOUSE
CARNEGIE INSTITUTION

CARRERE & HASTINGS, ARCHITECTS



MURRY GUGGENHEIM HOUSE, ELBERON, N. J.

RED

The Library of the Union League Club of Brooklyn

This series of advertisements has, in the main, served to show the great variety of recently constructed buildings in which Red

GUM

Gum has been used for fine interior trim. The illustration used this month is particularly interesting, for the Red Gum trim in this library is just as fine today as it was when it was built nineteen years ago. The Union League Club of Brooklyn opened its doors in November, 1890.

Red Gum, when it is properly manufactured and properly handled, will hold its shape and beauty as long as any hardwood used for trim purposes.

Architects desiring to see samples of Red Gum, both rough and finished, or who wish market prices of selected Red Gum, are invited to correspond with any of the following firms:

CARRIER LUMBER & MFG. COMPANY - - - Sardis, Mississippi
LAMB-FISH LUMBER COMPANY - - - - - Memphis, Tennessee
THREE STATES LUMBER COMPANY - - - - Memphis, Tennessee
HIMMELBERGER-HARRISON LUMBER COMPANY - Morehouse, Missouri
CHARLES F. LUEHRMANN HARDWOOD LUMBER CO., St. Louis, Missouri

Electric Elevators

We build all types of electric elevators
for
all kinds of service

Marine Engine & Machine Co.

Harrison (Newark), N. J.

We have supplied elevators for a number of the buildings illustrated in this issue

The Carrier Air Washer and Humidifier

The work done by the Carrier Air Washer and Humidifier may be enumerated as follows:

First—The air is thoroughly washed, removing all solid matter and such gases as are soluble in water.

Second—In winter, no matter how cold the incoming air, it is tempered and heated to practically a constant temperature.

Third—The air is humidified and the relative humidity automatically controlled by a very accurate and simple method.

Fourth—The air in summer is cooled from 5 to 19 degrees. This cooling is due to evaporation when using the water over and over again, and will average about 14 degrees during the hottest part of the summer days.

Our engineer or catalog will call upon request to give any further information or advice.

CARRIER AIR CONDITIONING COMPANY
OF AMERICA
39 Cortlandt Street, New York

(147-C)

Send Dimensions and Floor Plans

The McCray Drafting Department will work out all the rest of the details—submit sketches, plans and estimates, for the style, placing and arrangement of the refrigerator.

The architect for the Holmes residence in Kansas City sent us floor plans and asked us to make a Special tile lined refrigerator to fit space of 60" wide x 42" deep x 96" high with outside icing door. The above Special No. 6081 was built and installed and is giving great satisfaction to the owner for it is placed in the most convenient location, and has the proper interior arrangement for his family requirements.

McCRAY REFRIGERATORS

(Keep things fresh)

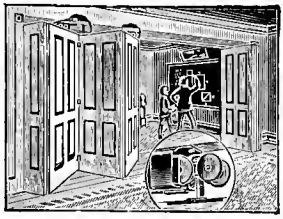
in stock sizes may be as truly an integral part of the house as the built-to-order refrigerators, by considering the refrigerator location early and making provision in accordance with the specific dimensions in Sweet's Index.

Fifteen floor plans showing the relative position of kitchen, pantries, refrigerator and outside icing facilities in representative American Houses, also exact measurements for arranging the wall opening for outside icing door and locating the drain pipe for stock sizes of McCray Refrigerators, will be found on pages 1082 to 1086 of the 1909 Sweet's Index.

A postal card request will bring you our best discounts, and a copy of the new book, *McCray Refrigerators in American Homes.*"

McCray Refrigerator Co.
905 Mill St., Kendallville, Ind.

Richard's Royal Ball Bearing Door Hanger



The Richards Ball Bearing Swivel Door Hanger

This hanger is fitted with a ball bearing swivel with vertical screw adjustment.

No hanger has been devised which is its superior for folding partitions.

A full line of the Richards hangers is described on pages 588-591, Sweet's 1910 edition.

We will send a hanger free to any architect requesting us to do so.

The RICHARDS MANUFACTURING CO. Inc.
Aurora, Illinois. 101 Reade St. N.Y.

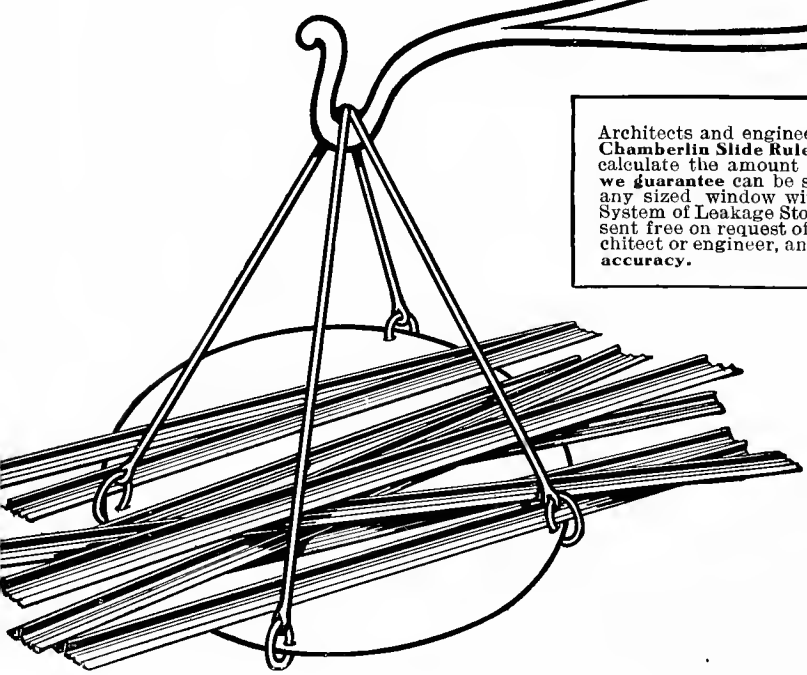
TEST IT

Make a paper cone and with the large end close to the window stop or on the parting strip of any unprotected window, note how much air is delivered from the small end of your cone. Go further and put your anemometer at the small end of the cone and measure the air delivered through one lineal foot of window crack.

With a perceptible wind blowing against the window, you will be surprised to know the great volume of cold air leakage through every lineal foot of unprotected window crack.

You will understand why you can cut out 20% of the radiation when you specify the Chamberlin Leakage Stop System. You will know that we are running no risks in guaranteeing that the amount saved on the radiation will pay for the cost of installing the Chamberlin system.

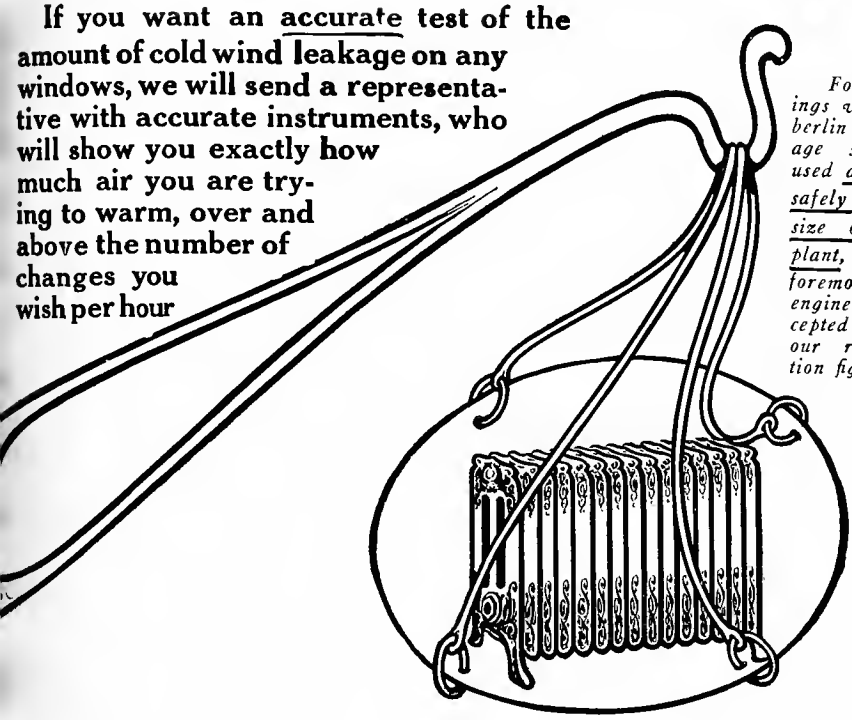
You will realize, as so many other architects and engineers have, that Chamberlin weatherstrips weigh more than surplus radiators in heating a building.



Architects and engineers should have the **Chamberlin Slide Rule**, by which you can calculate the amount of radiation which **we guarantee** can be saved by equipping any sized window with the Chamberlin System of Leakage Stop. This rule will be sent free on request of any interested architect or engineer, and **we guarantee its accuracy.**

TO-DAY

If you want an accurate test of the amount of cold wind leakage on any windows, we will send a representative with accurate instruments, who will show you exactly how much air you are trying to warm, over and above the number of changes you wish per hour



For a list of buildings where the Chamberlin system of leakage stop has been used and paid for by safely reducing the size of the heating plant, write us. The foremost architects and engineers have accepted and are using our radiation reduction figures.

This is the guarantee of Chamberlin system of leakage stop without cost

This company will undertake to apply the Chamberlin system of window leakage stop to any new building in any part of this country, and will guarantee that it will be possible to reduce the size of the heating plant, as figured for unprotected windows, at least enough so that the money saved on the heating plant will pay the entire cost of the Chamberlin Metal Weather Strip installation for the building.

An engineering department is maintained at the main office at Detroit, and this department will make figures of the square feet of radiation required where Chamberlin Metal Weather Strips are used, and we will guarantee both the accuracy of our figures as well as that the saving on the heating contract will pay for the Chamberlin installation that makes the radiation saving possible.

For detailed information in regard to this legal guarantee, for engineering data and formulae for figuring radiation where the Chamberlin system of window leakage stop is used, and correspondence regarding blue prints of buildings under consideration, address the engineering department at Detroit main office.

Chamberlin Metal Weather Strip Company

Detroit, Michigan

Cement Mantels

We are making mantels out of cement. Mantels that have every appearance of costly hand executed stonework. The delicacy of detail is there, the fine texture finish is secured. We have them in numerous designs, from the simplest to the most elaborate. They range in colors from soft gray to rich reds. They cost less than stone or wood.

Send for beautifully illustrated catalog which, besides 49 distinctive mantels, shows over 600 objects of art we make in cement.

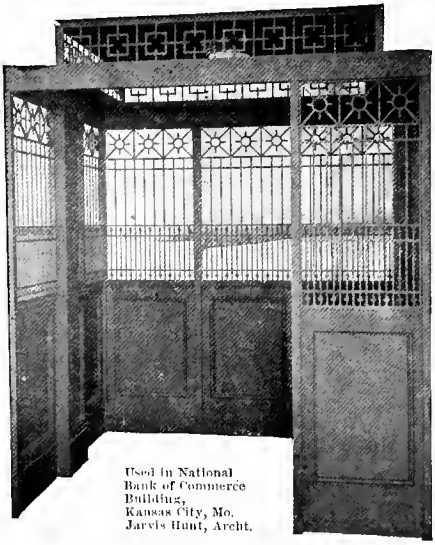
The Erkins Studios

303 MADISON AVE., NEW YORK
AND CARRARA, ITALY

Philadelphia Branch, 20 South Seventh Street

The Cleveland Art Metal Company

3620 Superior Avenue, Cleveland, Ohio



We make a Specialty of Manufacturing
Elevator Cars & Enclosures
Also
Bank and Office Railings
Grilles, Window Guards, etc.

A. BUSSE, President

Manhattan Iron Works

ALL KINDS OF

Iron Work for Buildings

302 East 98th St. NEW YORK

Telephone, 672 Lenox

HESS MEDICINE SANITARY CABINET LOCKER

THE only modern Sanitary Steel Medicine Cabinet or Locker. Handsome beveled mirror door. Snow white, everlasting enamel, inside and out.

FOR YOUR BATHROOM

Costs less than wood and is better. Should be in every bathroom. Is dust, rm and vermin proof and easily cleaned with warm water.

Made in four styles and three sizes. Price $7.00 and up.

Send for illustrated circular.

HESS, 933 L Tacoma Bld., Chicago

See Our Catalog in SWEET'S Pages 1205-6 and 7

The GEO. RACKLE & SONS COMPANY

ARTSTONE

ARTSTONE is a manufactured stone used for building decorations, structural block stone, church window frames, fountains, vases, etc. It is manufactured from the best non-staining Portland cements and aggregates selected to produce the most beautiful colors and textures. Forty-five years' experience has taught us how to make this stone, which we can thorougbly guarantee. The colors and textures of this material are more uniform and pleasing to the eye than that of natural stone. The snappy and crisp effects of clay modeling are present in the execution.

WE GUARANTEE NO DISCOLORATION AND MINIMUM OF ABSORPTION. :: PLEASE SEND FOR SAMPLES. :: :: ::

The most beautiful architectural effects can be produced by us at a great reduction in cost over that of the laborious method of cutting and carving of natural stone.

The Geo. Rackle & Sons Co., Cleveland, Ohio

2900

Special Furniture for Special Needs

A special department in the Karpen organization is devoted to the production of furniture specially designed by the architect. Our organization permits us to fill such orders promptly, while an unrivaled assortment of furniture in designs suitable for the furnishing of public and private buildings enables us to fill general orders without delay.

Send for Free Style Book J A

It should have a place in the library of every architect; 72 pages show over 500 illustrations of Karpen Furniture—artistic interiors drawn by leading decorators. It illustrates in color the different woods and their finish, and the beautiful tones of Karpen Sterling Leather. This book is full of splendid suggestions that are invaluable to you—gives information that is of vital importance. Write for it today.

2799

Karpen Guaranteed Upholstered Furniture CHICAGO-NEW YORK

TRADE MARK

S. Karpen & Bros.

Karpen Building CHICAGO — Karpen Building NEW YORK

1,829 Karpen pieces have been used in furnishing the new Senate office building throughout. Karpen furniture was specified in competition with manufacturers everywhere. (29)

2903

The Peyton Building, Spokane, Wash. Equipped with Mullins Metal Fire Proof Windows.

"An Ounce of Prevention"

It is easier to ***prevent*** a disastrous fire than it is to ***stop one.***

The weak point in all buildings is through the windows.

These openings can be made as fire proof as the walls themselves by installing ***Mullins Fire Proof Windows.***

Mullins

Fire Proof—Storm Proof—Dust Proof

Windows

have successfully withstood the severest trials not only in factory experiments but in actual conflagrations.

Mullins Windows are perfect windows in every way.

Entire lock-seamed metal with no soldered joints in frame, sill or sash. They cannot warp or buckle and are not affected by heat, expansion or contraction.

The Peyton Building of Spokane, Washington, shown herewith, is one of the many hundreds of modern fire proof buildings equipped with Mullins Windows.

Mullins Fire Proof Windows are manufactured under the supervision of **Underwriters' Laboratories, Inc.,** according to the latest specifications of the **National Board of Fire Underwriters,** and **every window is inspected, approved and labeled** with their **official label.**

We have catalogues showing our various lines of product. Please specify the particular class of sheet metal work you are interested in and we will send you the proper catalog for the same.

W. H. Mullins Company

340 Franklin Street — **Salem, Ohio**

Atlantic Terra Cotta

was freely employed in the construction of the following buildings, designed by Carrere & Hastings, illustrations of which appear in this issue:

Methodist Church, St. Augustine, Fla.
Presbyterian Church, St. Augustine, Fla.
Ponce de Leon Hotel, St. Augustine, Fla.
Alcazar Hotel, St. Augustine, Fla.
Residence of E. C. Benedict, Greenwich, Conn.
Laurel in the Pines, Lakewood, N. J.
Mail and Express Building, New York.
Pierce Building, New York.
Jefferson Hotel, Richmond, Va.
Case Memorial Library, Auburn, N. Y.

The use of architectural terra cotta is appealing more and more to the progressive architect and builder. Its employment insures reasonableness of first cost, unlimited scope for beauty of design, and where color effects are desired is the building material *par excellence.*

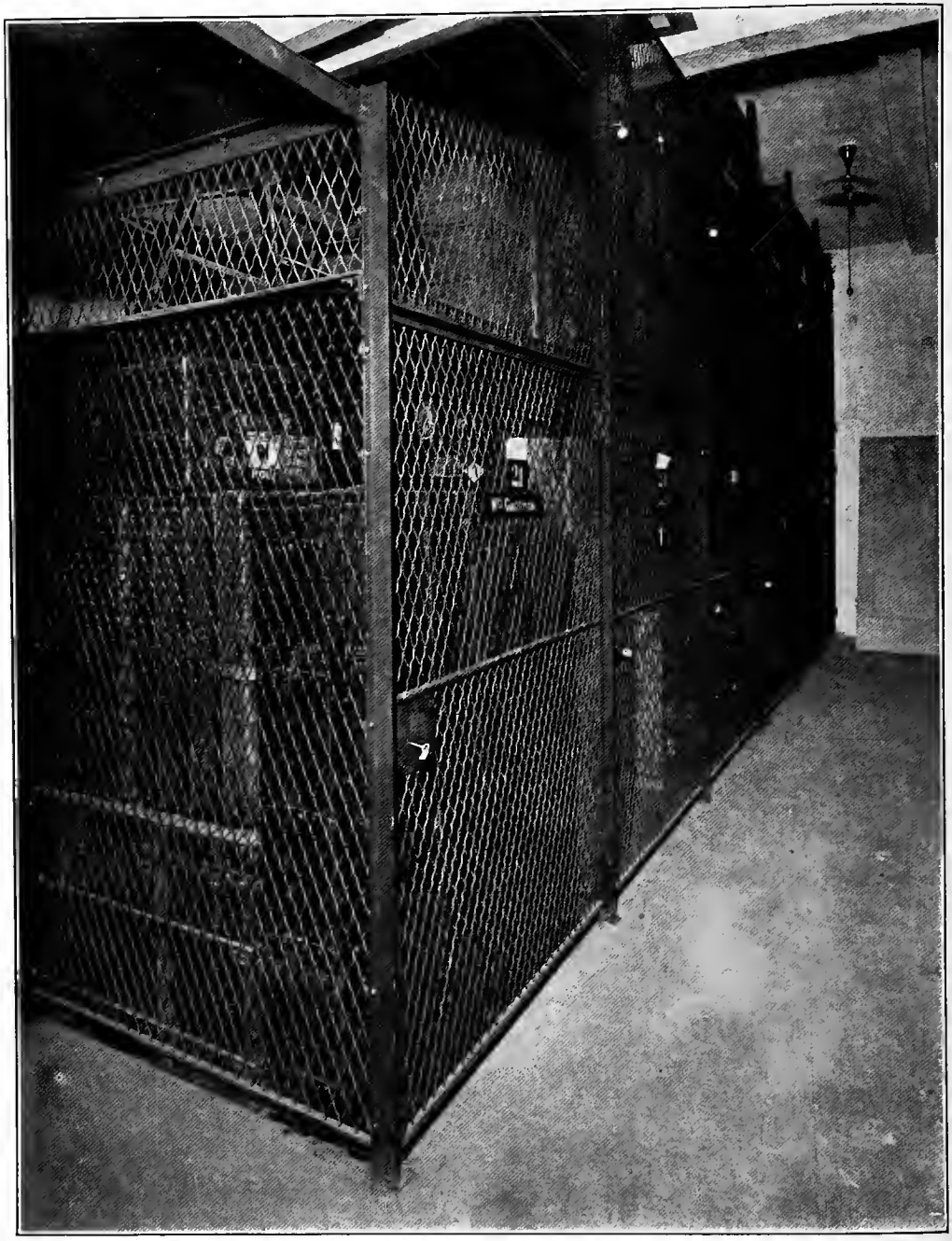
The very complete organization of our business enables us to give careful attention to all details and to assure prompt deliveries.

Atlantic Terra Cotta Co.

Main Office:

1170 BROADWAY :: :: :: NEW YORK

Branches in all principal cities



SECTION OF TRUNK ROOM AT 471 PARK AVENUE BUILDING, NEW YORK CITY
EXECUTED AND ERECTED BY

Estey Wire Works Company

Established 1876

59 Fulton Street, New York

Ornamental Wire Work of Every Description. Brass and Bronze Railings and Grills.
Iron Railings and Grills in Various Finishes. Bank Work a Specialty.
Complete Catalog of Designs on Application.

Are Your Plans Complete?

Not Unless They Cover

Western-Electric

"Bell" Grade

INTERCOMMUNICATING TELEPHONES

which afford the most convenient telephone service between the different rooms of a residence, as well as between the house and garage or stable.

These are Independent Inside Telephones
They Require no Switchboard—No Operator
The Action is Automatic

Western Electric Intercommunicating Telephones are made in various types and capacities, and are the products of the foremost telephone engineers, and the oldest and largest telephone manufacturers in the world.

Every Architect Appreciates

the convenience of a private telephone system in the home and should be familiar with the improvements which are embodied in the latest designs.

A home builder can install a complete private intercommunicating system of ten stations at a cost of from $5.00 to $25.00 per station. This includes everything, even the cost of labor.

Our Guarantee Protects the Architect—the Contractor and the User.

Write our nearest house for Bulletins Nos. 2744, 2745, 2766.

Hall
Library
Dining-room
Kitchen
Bedroom
Garage

THE WESTERN ELECTRIC COMPANY HAS AN EQUIPMENT FOR EVERY ELECTRICAL NEED

WESTERN ELECTRIC COMPANY

AMERICAN TELEPHONE & TELEGRAPH CO. — LOCAL AND LONG DISTANCE TELEPHONE — BELL SYSTEM AND ASSOCIATED COMPANIES

New York, Chicago, Philadelphia, Indianapolis, Boston, Cincinnati, Pittsburg, Minneapolis, Atlanta, *Write our Nearest House* Saint Louis, Kansas City, Denver, Dallas, Omaha, San Francisco, Los Angeles, Seattle, Salt Lake City

BERLIN
Telephon Apparat Fabrik E. Zweitusch & Co.

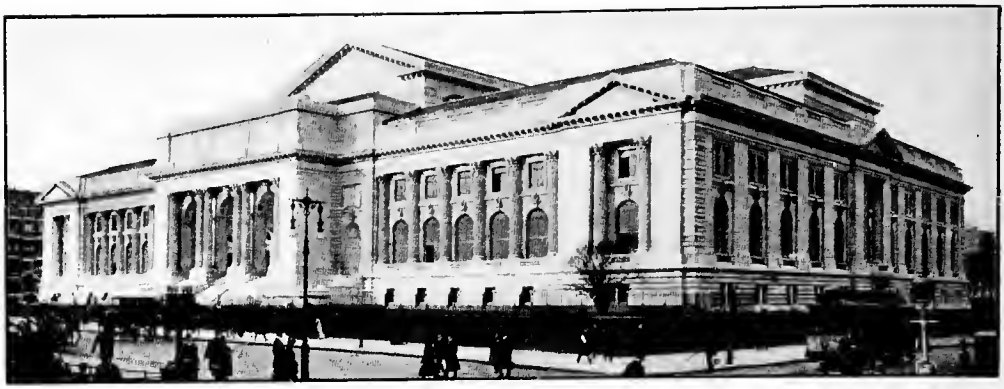
LONDON
Western Electric Company.

MONTREAL, WINNIPEG and VANCOUVER
Northern Electric and Manufacturing Co., Ltd.

PARIS
Societe de Materiel Telephonique

ANTWERP
Bell Telephone Manufacturing Co.

DYNAMOS-MOTORS — WESTERN ELECTRIC COMPANY — CABLES-TELEPHONES-SUPPLIES

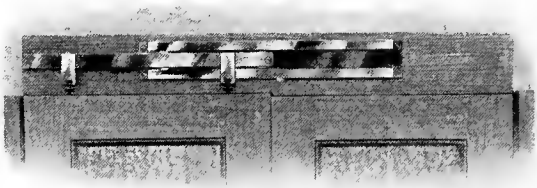


NEW YORK PUBLIC LIBRARY
Carrere & Hastings, Architects

EQUIPPED WITH

Reliance Ball Bearing Door Hangers

For description of this building, see text of this issue.



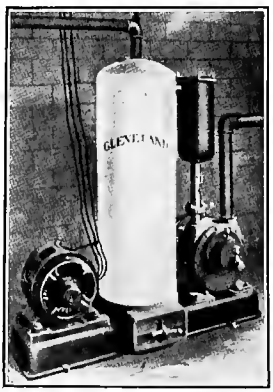
We make hangers for

Single Doors, Straight or Curved
Double Doors, Straight or Curved

With double gear device for moving two doors in opposite directions.
A double speed device for moving two doors in the same direction, one at double the speed of the other.
Nearly all up-to-date office buildings in New York City are equipped with our hangers.

Reliance Ball Bearing Door Hanger Co. 1 Madison Ave. New York City

---



The "Cleveland"

Direct from the Factory

SIMPLE TO HANDLE
EASILY INSTALLED
ECONOMICAL TO MAINTAIN

All AIR disturbed in cleaning is FOUL AIR, and should be removed with the DIRT. Our vacuum cleaning system carries off and disposes of all DIRT, DUST and FOUL AIR.

A device that does not remove all Foul Air and Unclean Substances is only doing half its work, and does not accomplish the fundamental purpose.

The owner of a "CLEVELAND" has perfect sanitary conditions. Let us know your requirements. AGENTS WANTED.

The Cleveland Vacuum Machinery Company

For The Craftsman Style

of architecture and interior finish, the designs and construction of **Morgan Doors** are in perfect keeping. They are finished in the white and may be stained any desired color.

Cross section showing construction of 1⅜ inch door.

The name "*Morgan*" is branded on each door.

are perfect doors. Built of several layers with the grain running crosswise, making shrinking, warping or swelling impossible. Veneered in all varieties of hardwood—birch, plain or quarter-sawed red or white oak, brown ash, mahogany, etc.

Morgan Doors are light, remarkably strong and absolutely perfect in every detail of construction. Each **Morgan Door** is stamped "*Morgan*" which guarantees quality, style, durability and satisfaction. *Waterproof glue used.*

In our new book, "The Door Beautiful," **Morgan Doors** are shown in their natural color and in all styles of architecture—Colonial, Empire, Mission, etc., and it is explained why they are the best and cheapest doors for permanent satisfaction in any building. ***A copy will be sent on request.***

Architects: Descriptive details of Morgan Doors may be found in Sweet's index, pages 678 and 679.

Morgan Company, Dept. R, Oshkosh, Wisconsin.

Morgan Sash and Door Company, Chicago, Ill.

Morgan Company, Oshkosh, Wisconsin. **Morgan Company, Baltimore, Maryland.**

NONPAREIL CORK PIPE COVERING

For Brine, Ammonia, Ice Water and Cold Water Lines

Cross Section of Nonpareil Cork Pipe Covering

Its Composition—pure, granulated cork, compressed and baked in molds of proper shape and size, the outer and inner surface being coated with mineral rubber. It is of necessity, therefore, light and clean.

Its Structure—simple, compact and firm, not affected by continual jarring and vibration.

Its Sectional Form—renders its application easy and rapid. The sections are three feet long, consisting of a single jacket.

An examination under the microscope would reveal the cellular structure of the cork itself—millions of tiny sealed air spaces impervious to air and moisture. This accounts for the covering's *low heat conductivity;* renders it *nonabsorbent of moisture*, and insures for it a *longer life in service* than any other covering on the market.

ARMSTRONG CORK CO., Insulation Department, Pittsburgh, Pa.

DISTRIBUTERS

NONPAREIL CORK WORKS, Fulton Building, New York City
JOHN R. LIVEZEY, 1933 Market Street, Philadelphia, Pa.
THE PHILIP CAREY COMPANY, Lockland, Cincinnatt, Ohio

Gloss—Matte—Egg Shell.

Porcelite

—the Enamel Finish with the "Twenty Years' Record"

TEN years of service and still in perfect condition — that's the "Porcelite" record. And instead of one or two examples, we can refer you to over 200 buildings where the "Porcelite" was applied prior to 1899, and it still retains its original, fresh appearance.

The Thomson Wood Finishing Co.
Philadelphia

Jennings & Mount, 180 Broadway, N. Y., Reps.

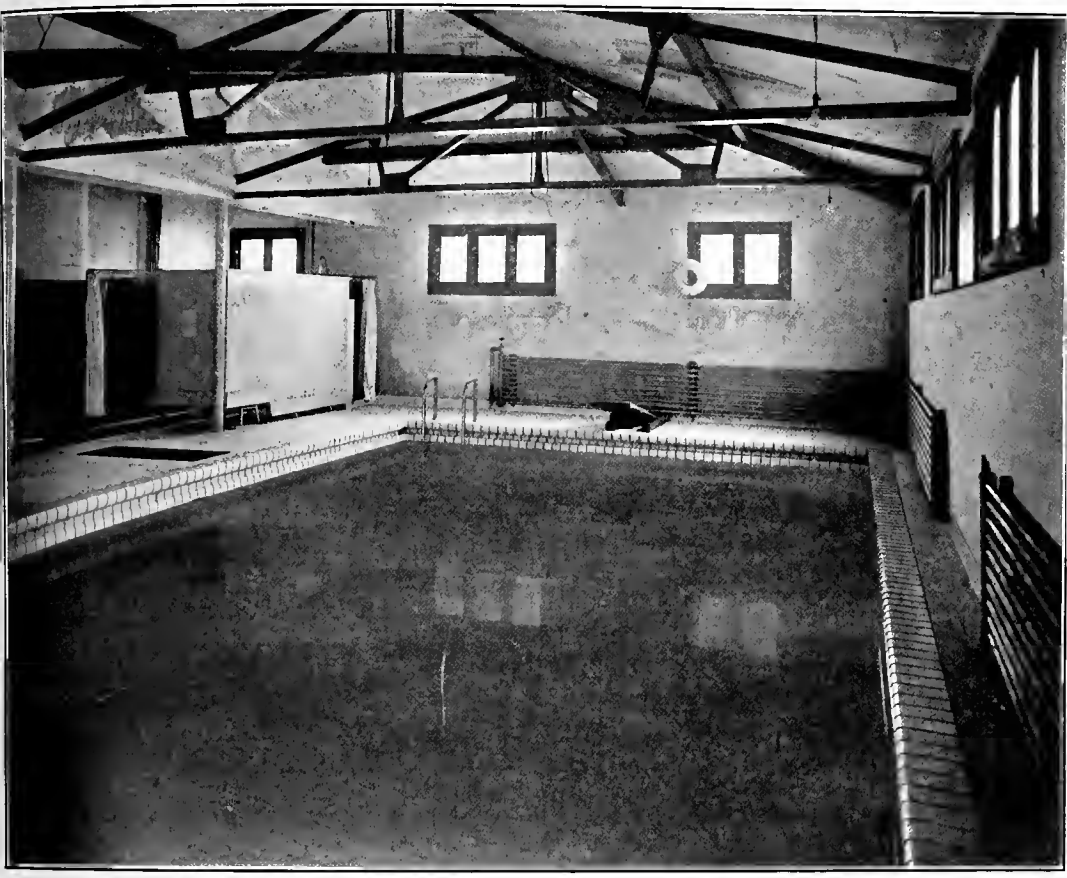
"Porcelite" on Cement

For a porcelain or tile effect on Cement or any other plaster use high gloss "Porcelite."

It is a finish that will neither crack, peel nor soften.

See Sweet's, pages 1352-3

HAVE A PLUNGE BATH



NO fine country place is complete without a *modern* porcelain-lined plunge in which the household and guests can enjoy one of the really great luxuries of life—a plunge in a clean, clear, and safe pool.

Our plunge-bath design and construction (patented) are scientifically correct, so that the water is constantly and automatically kept fresh and the surface kept free of all floating scum or foreign matter. This assures a fresh, clear plunge at all times.

Send for our new book telling the history of plunge baths from the Roman days to today. Details of construction are shown, as well as views of many of America's finest artificial swimming pools.

GARAGES We wish to call to the notice of architects the merits of our enameled brick for garage interiors. We have recently furnished the material, among many others, for the garages of Arthur Du Bois, H. C. Cammann and Henry F. Schwartz, Greenwich, Conn., designed by Messrs. Carrère & Hastings, architects.

Correspondence invited with architects and consultation services freely given in all matters pertaining to unusual construction involving the use of enameled brick.

The American Enameled Brick & Tile Company

One Madison Avenue, New York, N. Y.

Agents in 65 principal cities.

See our catalogue on pages 101-107 "Sweet's" Catalogue, 1910.

THE IDEAL FLOORING

Puritan Sanitary Flooring

FOR

Schools, Hospitals, Lavatories, Baths, Hotel Kitchens, Automobile Garages, Stair Treads, Laundries, Corridors, Bank Vault Floors, etc.

It gives a pleasing, glossy finish, and cannot shrink or crack.

New York Riding School, New York City, N. Y. Bradford Lee Gilbert, Architect, New York

Puritan Sanitary Flooring has been laid throughout the entire country with most satisfactory results.

Estimates of cost of Puritan Sanitary Flooring will be cheerfully given. Samples sent upon request.

WARREN BROTHERS COMPANY

Tel. 3663 Oxford 59 Temple Place, Boston, Mass.

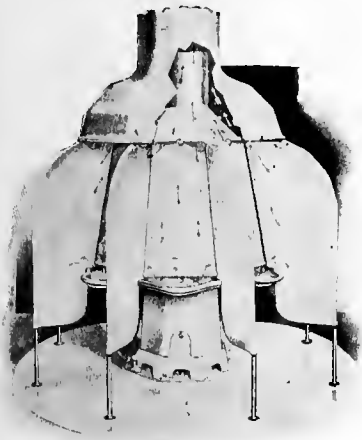
Registered Trademark "PURITAN"

COLUMBUS HEATING AND VENTILATING CO.

MANUFACTURERS OF NEW AND

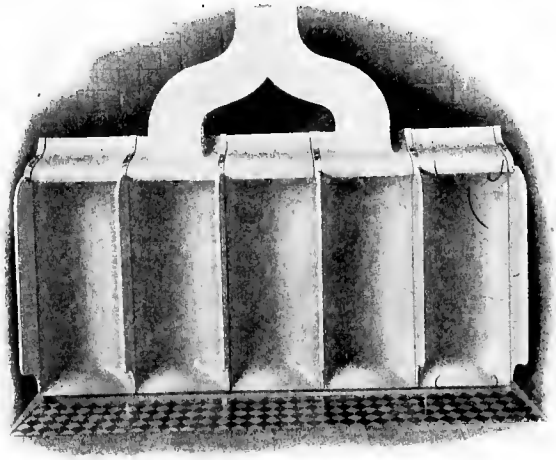
ABSOLUTELY SANITARY URINALS AND CLOSETS

Specially Adapted for Schoolhouses, Public Buildings, Comfort Stations, Railroad Stations, Hotels, Manufacturing Plants, Etc.



1-S
Octagon Urinal

This ventilated urinal is comprised of eight stalls with 24 points of ventilation, 3 to each stall. One point at base of urinal, one at receptacle, into which the water flows, and one underneath the top hood. This urinal is constructed of cast iron with heavy porcelain enameling, is absolutely sanitary, because no odors can escape into room and is as well a ventilator for the entire toilet room.



2-S
Side Wall Ventilated Urinal

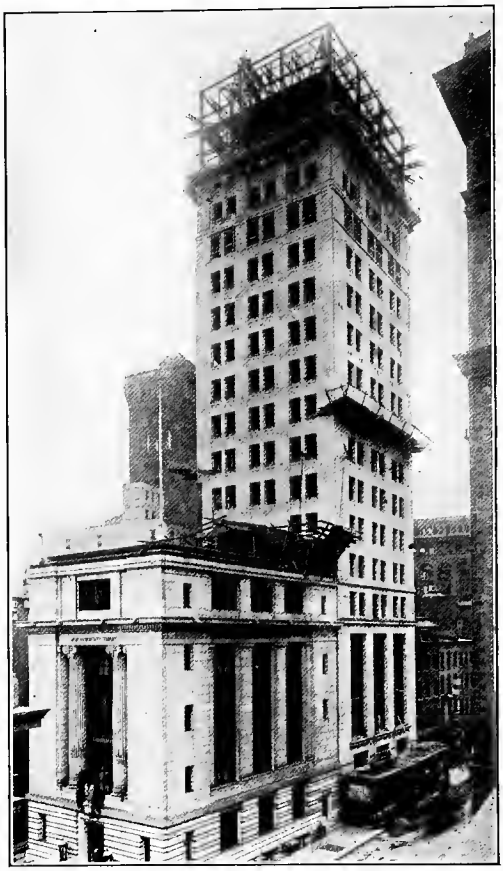
This urinal is constructed of cast iron, with heavy porcelain enameling, with two points of ventilation to each stall, at space between the trough and base of stall and underneath hood at top of stall. This can be placed along the wall forming ventilating space between each concave back and the wall, the water flowing over the entire concave back and into the trough. This is the best side wall urinal on the market.

Columbus Heating & Ventilating Co.

COLUMBUS, OHIO

FLOORS

ROOFS



STOCK QUOTATION TELEGRAPH COMPANY BUILDING

CLINTON & RUSSELL, Architects
NEW YORK

THOMPSON-STARRETT CO., Builder
NEW YORK

Six years ago the CONTINUOUS BOND was an unknown expression. Today the leading architects and engineers in the country specify and demand its use for reinforcing concrete floors and roofs. THERE IS A REASON.

CLINTON WIRE CLOTH CO.

CLINTON, MASS.

Ceilings

FIREPROOFING DEPARTMENTS

ALBERT OLIVER

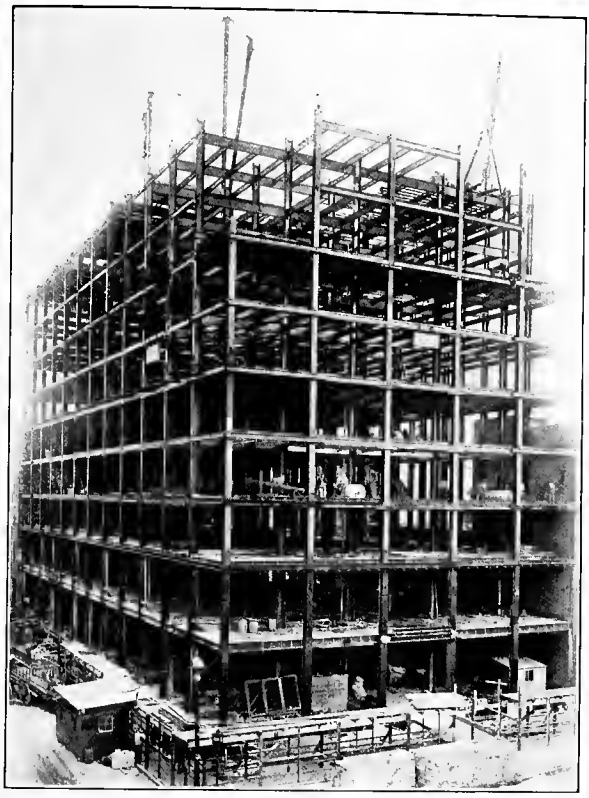
1 Madison Ave., New York

WASHINGTON: Kosslyn Supply Co., Colorado Building
CHICAGO: Clinton Wire Cloth Co., 30-32 River Street
CLEVELAND, OHIO: C. H. Truscott
ST. LOUIS: Hunkins-Willis Lime & Cement Co.
SAN FRANCISCO: L. A. Norris, 835 Monadnock Building
SEATTLE: L. A. Norris, 909 Alaska Building
BUFFALO: Buffalo Wire Works Co., Inc.
SYRACUSE: National Construction Co.

Partitions

FLOORS

ROOFS



SCHLEGEL INVESTMENT COMPANY BUILDING,
NEW YORK CITY

C. F. HOPPF, Architect
New York City

THEODORE STARRETT, Builder
New York City

Six years ago the CONTINUOUS BOND was an unknown expression. Today the leading architects and engineers in the country specify and demand its use for reinforcing concrete floors and roofs. THERE IS A REASON.

CLINTON WIRE CLOTH CO.

CLINTON MASS.

Ceilings

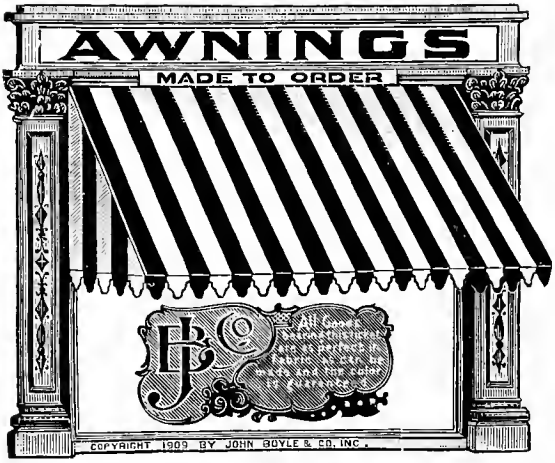
FIREPROOFING DEPARTMENTS

ALBERT OLIVER

1 Madison Ave., New York

WASHINGTON: Rosslyn Supply Co., Colorado Building
CHICAGO: Clinton Wire Cloth Co., 30-32 River Street
CLEVELAND, OHIO: C H. Truscott
ST. LOUIS: Hunkins-Willis Lime & Cement Co.
SAN FRANCISCO: L. A. Norris, 835 Monadnock Building
SEATTLE: L. A. Norris, 909 Alaska Building
BUFFALO: Buffalo Wire Works Co., Inc.
SYRACUSE: National Construction Co.

Partitions



This sign hangs in first-class Awning Shops

50 years' experience is behind the label and monogram on JB&Co

Awning Stripes

Your AWNING MAKER can be relied on for good trimmings and workmanship if he uses the best cloth in the market.

COTTON CANVAS FOR ROOFING

GULF STREAM EXTRA

White Canvas
All Widths
All Weights
Any Quantity

BEST FOR ALL ROOFING PURPOSES

BAYONNE ROOF AND DECK CLOTH

Easier to lay, lasts longer and requires only one coat of paint.

NO ROTTING, LEAKING OR PEELING

JOHN BOYLE & CO.

COTTON DUCK For All Purposes

112-114 Duane Street
70-72 Reade Street } NEW YORK

ST. LOUIS: 202-204 Market Street

The Decorations of the White House have for years included—

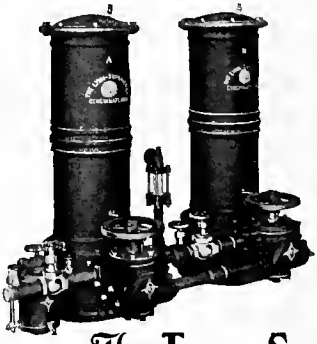
Porcelite

the Enamels made for every purpose.

Write for "Records of Twenty Years' Service"—Free.

The Thomson Wood Finishing Co.

Philadelphia



LYNN Filters

For Entire Supply Residences, Apartments, Office Buildings and Institutions, maintain the greatest efficiency for the past fifteen years.

Send for catalog and full information.

The Lynn-Superior Co.

ONE MADISON AVE., NEW YORK

C. G. HUSSEY & CO.

Pittsburg, Pa.

MANUFACTURERS OF CORRUGATED ROUND AND SQUARE

COPPER CONDUCTOR PIPE

EAVES TROUGHS, ELBOWS AND SHOES

SHEET COPPER FOR CORNICE AND ORNAMENTAL WORK

"KOH-I-NOOR" PENCILS

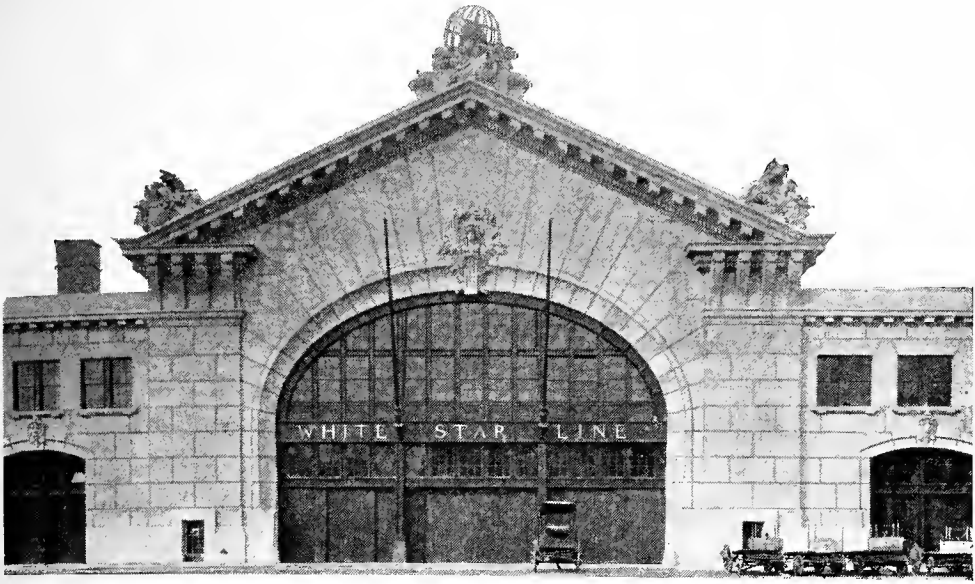
For Architects and Artists

Universally used the world over.
A complete assortment of degrees and large stock constantly on hand.

KEUFFEL & ESSER CO.

Direct Importers

127 Fulton Street : : : New York



Beauty, Durability and Economy

recommend in highest terms

EDISON PORTLAND CEMENT

for all sorts of buildings its absolute merit
is readily recognized in the extensive

$10,000,000 Chelsea Dock Improvements

half a mile of buildings from Little 12th to 23d Sts., New York, is sufficient recommendation to many, while all who investigate must acknowledge the convincing force of its worthfulness.

See the buildings; note the wide range of uses diverging from the standpoints of art and utility due to the use of this cement.

The possibilities of the Edison Portland Cement lie entirely with the architect employing it. He secures his object of durability; he develops his original ideas for embellishment—and all with the same material.

Edison Portland Cement will bind more sand, crushed rock or gravel with greater strength than any other brand, because of its grade.

Uniformly 10% Finest Ground in the World

Specify Edison Portland Cement for the greater strength, greater beauty, greater dependability of your work.

We guarantee prompt delivery of any quantity

EDISON PORTLAND CEMENT COMPANY

935 St. James Building, New York City

GACO
BALL COCK

New Principle **Screw Operated**

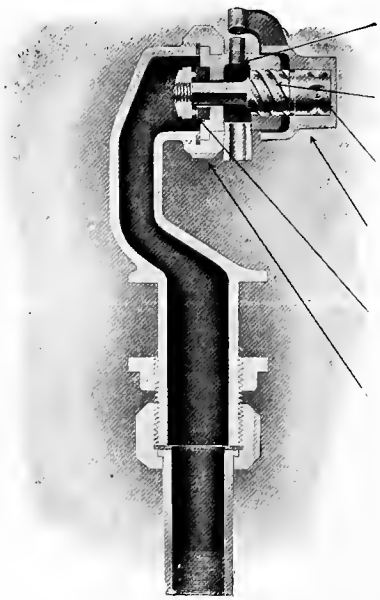
BALLCOCKS are to the closet tank what the heart is to the human body—**the center of the circulating system**

SUITABLE FOR ALL PRESSURES

The Ballcock is the only part of the tank under pressure; therefore should be given **serious consideration when specifying**

Positive Action

Self Closing



For every Closet Tank on which the walls give out, there are ten in which the Ballcocks fail

Specify closets equipped with the **GACO Ballcock**

Self Cleaning Seat

Outlasts the Tank

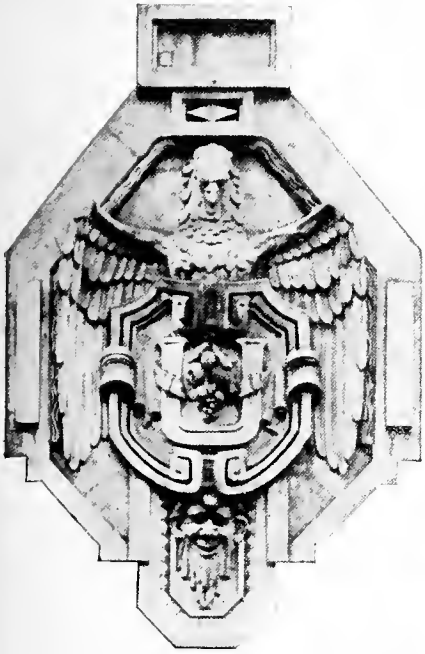
The Ballcock should be noiseless. The GACO is noiseless in operation, and affords insurance against the annoyance of aggravating sounds from the bathroom penetrating to other parts of the house.

Architects, protect your clients. The GACO Ballcock is guaranteed by an absolutely reliable concern. We do not merely say "guaranteed," but attach a written two years' warranty to each GACO Ballcock, agreeing, if it leaks, sings, whistles or hammers, to replace it or refund money, and also allow cost of labor replacing it.

INTERESTING BOOKLET ON REQUEST

PITTSBURGH GAGE & SUPPLY CO., Mfrs.

30th St. and Liberty Ave., Pittsburgh, Pa.



Cast cement ornament weighing 1000 lbs.

Architectural Decorating Co.

Seattle **Chicago**

Ornaments in Plaster, Staff, Composition and Cement, for interior and exterior purposes.

We issue two complete and very extensive catalogues to architects and the trade only.

Frank A. Seifert Plastic Relief Co.

2625-2631 Dayton Street, St. Louis, Mo.

A NEW IDEA in

Stone Furniture

For Halls, Sun Parlors and Gardens

Our invention of POMPEIAN STONE makes it possible to reproduce classic and Italian motifs in pedestals, urns, sundials, flower boxes and benches. They are indestructible, beautiful and moderate in price. Can be colored gray, old ivory or white.

Herman Gensch Co.

Architectural Sculptors

Studio, 1521 Eastwood Ave., Chicago

Manufacturers and Designers of all kinds of Plaster and Cement Ornament, executed from architects' plans and specifications

Architects interested in the artistic possibilities of cast cement ornament for concrete buildings, properly executed classic cement furniture, vases, etc., for interior or garden ornament, should send for our new catalogue—free upon application.

Casement Windows

The Sperry Casement Window Lock and Adjuster has made the picturesque and popular casement window the easiest window to open and close; the simplest and surest window to lock, either open or closed; the only window that cannot rattle in any position.

Sperry Casement Window Adjuster

This fixture operates easily and opens the window out, the proper way. The screen, storm sash or curtains are not disturbed in operating the window, and the device holds the window rigidly at any point of adjustment. The window is positively locked when closed, and cannot rattle at any position. It is completely covered by the window stool. There are no levers or rods to project into the room. It can be easily placed in position by any carpenter.

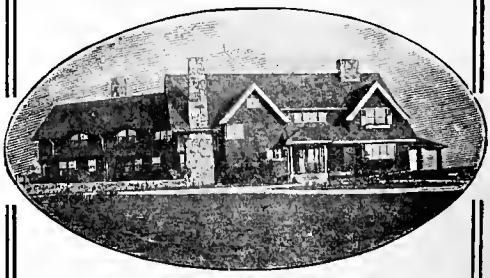
Prices, sizes, how to detail and how to specify, on page 573, Sweet's Index.

If you wish to see a working model write us.

Oscar Rixson Company

111 West Harrison Street CHICAGO

Chapman & Frazer, Architects, Boston



Satisfied Customers

Are Our Best Advertisements

"A little over five years since I treated my two houses with your Creosote Stain, and can say it has proven highly satisfactory. HARVEY C. KEATOR, M.D., "Rosendale, N. Y."

"When I had my country house painted, now five years ago, I had the roof stained with your forest green. It has worn remarkably well, the *painted part* of the house having had *to be done over three times during the same period.* F. C. MEAD, Lake Waccabuc, N. Y."

Every one who intends to build should investigate

Cabot's Shingle Stains

The Cheapest, most artistic, and most durable exterior colorings

Samples and full information sent on request

SAMUEL CABOT, Inc., Sole Mnfrs., Boston, Mass.

28 Dearborn Ave., Chicago 1133 Broadway, N. Y.

Agents at all Central Points

Factory Sites

ARE OFFERED

Manufacturers

WITH

Satisfactory Inducements
Favorable Freight Rates
Good Labor Conditions
Healthful Communities

ON THE LINES OF

The Illinois Central R.R.

AND THE

Yazoo & Mississippi Valley R.R.

For full information and descriptive pamphlet address

J. C. Clair, Industrial Commissioner

Park Row, Chicago, Ill.

Surrounded with Knowledge

With this complete ten volume set of

Architecture, Carpentry and Building

you can practically surround yourself with the knowledge you need in your every day work. You can have at your fingers' ends, for instant use, the help and advice of forty experts.

The Reference Value is Guaranteed

by the fact that they are compiled from text books used in the correspondence courses of the American School.

Read What This Great Work Comprises

It is the most exhaustive, comprehensive and authoritative work on the building trades ever published. Covers every branch of building construction, from plans to finishing touches. Bound in half morocco; 4,670 pages, 7 x 10 inches, printed on special paper; large, clear type.

Contains: Plans, color plates and photos of buildings completed and in course of construction. Diagrams and sections showing all details. Over 400 full page plates. 3,000 detail drawings, diagrams, etc. Just the thing for the student and a practical guide for the experienced carpenter and an ever ready reference work for the expert.

Our Liberal Offer To introduce our Correspondence Courses, from which the cyclopedia is compiled, we offer this set of books at the special price of $24, payable $2 after 5 days and $2 a month. Regular price is $50. Order now and save over 50%

PARTIAL LIST OF CONTENTS

Reinforced Concrete; Contracts and Specifications; Building Materials; Carpentry; Building Superintendence; Estimating; The Law of Contracts and Liens; Masonry; Stair Building; Heating; Ventilation; Hardware; Steel Construction; Elevators; Architectural Drawing; Freehand Drawing; Blue Printing; Greek and Roman Orders; Painting; Wiring of Door Bells; Sheet Metal Pattern Drafting; Mechanical Drawing; Lettering; Rendering in Pen, Ink and Wash, etc.

For a short time we will include, as a monthly supplement, absolutely free of charge for one year, the TECHNICAL WORLD MAGAZINE. This is a regular $1.50 monthly, full of Twentieth Century Scientific facts, written in popular form. Also contains the latest discussions on timely topics in invention, discovery, industry, etc.

American School of Correspondence
CHICAGO U. S. A.

Please send set Cyclopedia of Architecture, Carpentry and Building for 5 days' free examination; also Technical World for 1 year. I will send $2.00 within 5 days and $2.00 a month until I have paid $24.00; otherwise I will notify you and hold the books subject to your order. Title not to pass until fully paid.

NAME.....
ADDRESS.....
EMPLOYER.....

Arch. Record, 1-10

SINGER TOWER
BY SEARCHLIGHT

Electric Work by

M. B. Foster Electric Company

109 West 26th St. New York

220 Devonshire St. Boston

THE ELY SCHOOL, STAMFORD
MR. CARRERE'S RESIDENCE

Equipped for Carrere & Hastings
See illustrations in text

Save Your Plate Glass

Use the bar that will best protect it from high wind pressure, etc.—"The Petz Bar." It is strong, rigid, artistic in appearance, and requires the least space of any safe bar. The superiority of the Petz Bar is recognized by those who are best able to know—the insurance experts and architects.

With this bar the glass is set from outside—an advantage that will at once occur to you.

Our booklet, "Modern Store Front Construction," shows the application of Petz Bars to various forms of fronts. Send for it today.

DETROIT SHOW CASE CO., Sole Makers, 477 West Fort Street, Detroit, Mich.

Residence of Dr. H. M. Pollock, Supt. Norwich State Hospital, Norwich, Conn. Cudworth & Woodworth, Architects

PARKER, PRESTON & CO.'S

Art in Shingle Stains

(Waterproof and Odorless)

THESE Shingle Stains contain no creosote and are absolutely free from all objectionable odor.

They create an impervious coating, causing the shingle to shed water like a duck's back, thereby keeping out dampness, the greatest enemy known to wood, and doubling the life of shingles.

Everything that enters into the make of ART IN SHINGLE STAINS is of the highest quality possible for man to produce; they are made in the most scientific manner. **Colors of extreme tone and richness and of absolute purity, combined with pure linseed oil and our special Waterproof Protective Liquid.**

Endorsed by Leading Architects and others

Send for cabinet of rich colors, free

Adamant Stucco, Brick and Plaster Coating
Waterproof Flat Brick Stains — Weatherproof Coating
Waterproof Brick and Stone Filler
Adamant Cement Floor Coating
MANUFACTURED SOLELY BY

Parker, Preston & Co., Inc., Norwich, Conn., U.S.A.
New York Branch, 25 West 42d Street

THE BEST IS NONE TOO GOOD.

SPECIFY

"Gardiner's Anti-Rust Paint"

FOR YOUR STRUCTURAL STEEL AND ADD MANY YEARS TO THE LIFE OF THE BUILDING.

GEORGE N. GARDINER & SON, 15 William Street, New York

Leonard D. Hosford

Plumbing Contractor

70 FULTON STREET
NEW YORK

Sanitary Inspection
Tests and Reports

On the job in Mason City

Read the following letter from a roofer in Mason City, Iowa:

"I put on a roof of your tin in this town thirty years ago, and it is a good roof today.
"Some tarred roofs are being put on here because they say they can't get 'Old Style' tin. I say, I CAN—I know you have it."

This is just another "long service" instance in the long list of buildings of every type roofed with

Taylor's "Target-and-Arrow" Tin

Formerly koown as Taylor's "Old Style"

A tin roof is light, sanitary and safe.

A roof of Taylor's "Target-and-Arrow" tin, made by the old, thorough "hand-dipped" method, which we alone employ, will outlast any other roof you can put on.

We are sending our book, "A Guide to Good Roofs," as soon as we receive your address.

N. & G. Taylor Company
The Old Philadelphia Tin Plate House
Established 1810—100th Year
Philadelphia

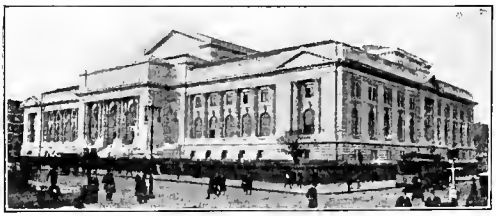
Bruner SIDEWALK LIGHTS

One Difference

The illustration shows the glass area of this construction. Besides being larger in area than any other system, this glass is of a special composition made by Macbeth-Evans Company for us exclusively. This is one reason why the "BRUNER" system excels—the glass does not break out or shale, giving the maximum amount of light, as it is not hollowed in the center. There are also many other exclusive advantages which are explained clearly in our booklet. The prices are scheduled and do not fluctuate.

See Sweet's or get our booklet

ALBERT GRAUER & CO.
PITTSBURGH
Detroit Cleveland Columbus Cincinnati



Used throughout the NEW YORK PUBLIC LIBRARY

"GIANT METAL" "RED METAL"

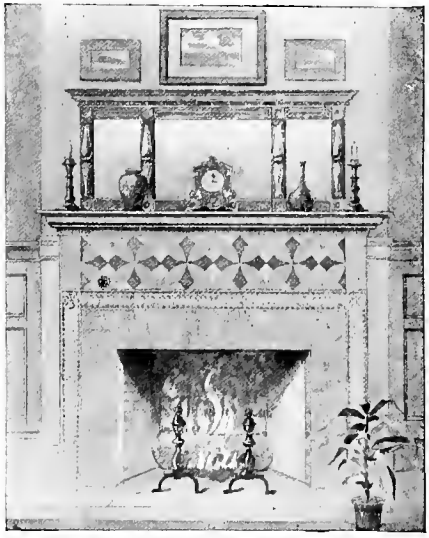
SASH CHAIN

Made from a secret composition. Is *pure bronze*, contains *no* spelter; *great tensile strength* and *wearing qualities*. Does not *crystallize* or become *brittle*.

IN USE OVER 30 YEARS
CAPACITY, 20 MILES PER DAY

Recognized as *standard* and specified by all *leading architects*.

The Smith & Egge Mfg. Co.
BRIDGEPORT, CONN.



Our Ornamental Brick Mantels

cannot be equalled. They are artistic, durable, healthful and not too costly. Easily set by local mason. Our ORNAMENTAL BRICK are cut deeper and are more beautifully moulded than any other make. Insist on having our BRICK MANTELS. Send for illustrated catalog

PHIL. & BOSTON FACE BRICK CO.
Dept. A
Office and Showroom, 165 MILK ST., BOSTON, MASS.

Hot Water Instantly

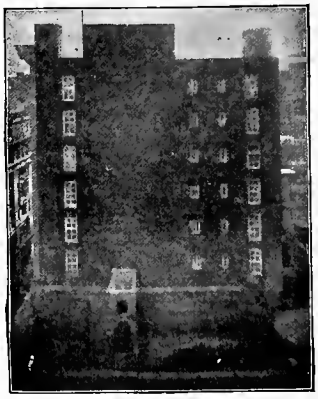
A hot bath while you undress for only 2 cts.

at any time by merely lighting the gas

A Humphrey Instantaneous Water Heater in a bath room makes hot water always ready. Turn on and light the gas—it pours forth and runs as long as the gas and water are left on. No expense when not drawing hot water. Handsome, durable, inexpensive and economical. No dirt, no labor, no repairs. Always ready. Price $23.50 to $140. Tell us your needs; we will gladly recommend what will best supply them. Handsome catalog No. 9 is free for the asking.

Humphrey Co., 539 Rose St., Kalamazoo, Mich.

Fire Protection That Protects



30 to 36 West Eighteenth Street

Side Wall Equipped With
Voigtmann Windows

One of the many instances proving the superiority of **Fire Windows** made by

VOIGTMANN & COMPANY
427 West 13th St., New York
50-52 East Erie St., Chicago

SEND FOR 1908 CATALOGUE

Sealed Window Buildings

Swift & Co., Chicago
(Located in the middle of the Union Stock Yards, Chicago)

Larkin & Co., Buffalo
(Situated alongside railroad yards, with hundreds of soft coal burning locomotives)

P. & L. E. R.R., Pittsburg
(This office building is in the smokiest spot in Pittsburg)

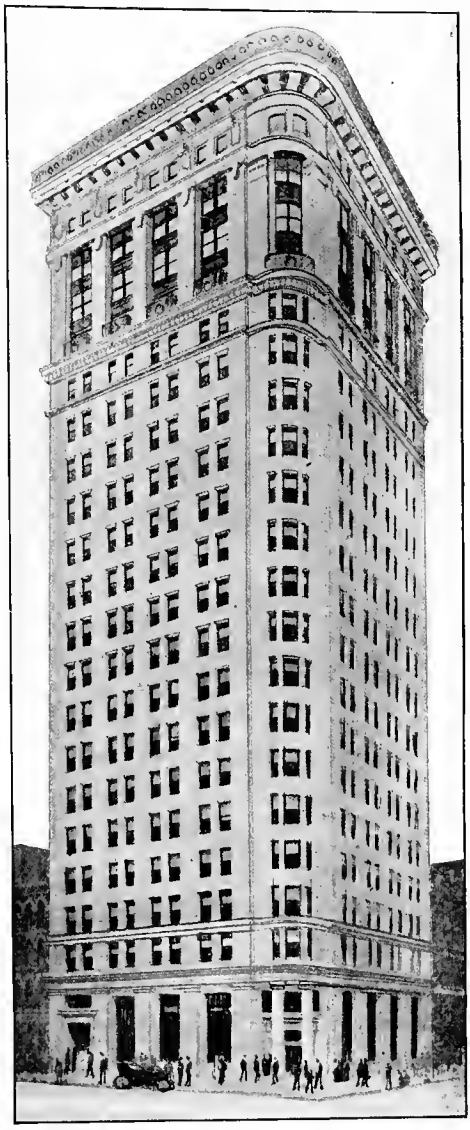
These buildings, used exclusively for office purposes by the corporations owning them, would be practically uninhabitable for the uses for which they were built except for the installation of "Thomas Acme" Air Washers, through which all air for each building is filtered.

The air delivered to each building from the air washer is scientifically ideal and physically refreshing.

There is no window ventilation, as all windows are sealed.

Detailed information on the astonishing results obtained in each of these three buildings will be mailed any interested architect.

Thomas & Smith
15 S. Carpenter St., Chicago



UNION BANK BUILDING, PITTSBURGH, PA.
MacClure & Spahr, Architects

CONSTRUCTED COMPLETE BY

A. & S. Wilson Company

Contractors & Builders

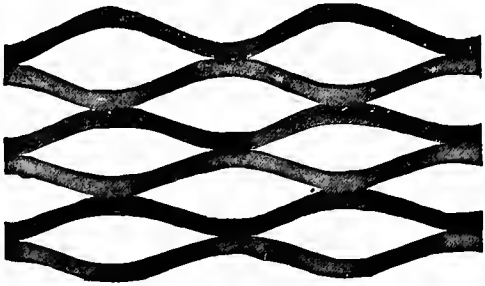
Pittsburgh Chicago

The Cleveland Expanded Metal Lath

is the only kind of metal lath that has been installed in the new

GRAND CENTRAL STATION, N. Y. City

"CLEVELAND"



The architects, Messrs. Reid & Stem, were so well satisfied with the practical results obtained from its use on the first section that they specified it exclusively for the second section.

The "Cleveland" has afforded genuine satisfaction to other eminent and exacting architects and engineers on many of the most conspicuous and substantial structures in the country.

WRITE FOR SAMPLES AND PRICES

THE GARRY IRON & STEEL CO.

CLEVELAND, OHIO Eastern Office, 1123 Broadway, N. Y.

BETTER CONSTRUCTION

CORRBAR BEAM UNITS

The complete reinforcement for a beam or girder in one assembled unit.
Self supporting and self centering.
Perfect provision for secondary stresses by the use of rigidly attached vertical and diagonal stirrups.
Provision for continuous action by extension of main reinforcement over the supports.
Shipped folded flat and arrives on the work in perfect condition.
Adaptable to any design or method of reinforcement, and can comply with the exact requirements of the Engineer's or Architect's plans.
Prices will be quoted for the complete reinforcement required for any structure fabricated, and delivered or in place in the forms ready for concrete.

Bulletin No. 1 on Fabricated Reinforcement, sent on request

CORRUGATED BAR COMPANY

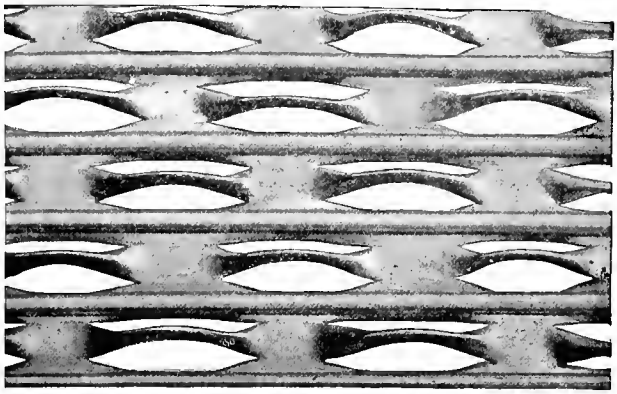
Nat. Bank of Commerce Bldg., ST. LOUIS

FABRICATED REINFORCEMENT

THE NEW "TRUSS-LOOP"

METAL LATH

IT IS RIGID



IT CANNOT FLATTEN

AN INNOVATION IN THE FIELD OF METAL LATH

See those loops? For strength's sake they are trussed. All our demonstrated "Perfection" claims for "Bostwick" Lath (old style) are intensified in the "Truss-Loop" (new style). Made in sizes as follows:

For Studding—12 in. or 16 in. O. C.
13½ x 96 in., =1 yd. to sheet
24 x 96 in., =1⅞ yd. to sheet
For Studding—16 in. O. C.
16¼ x 80 in., =1 yd. to sheet

BECAUSE OF ITS FIRE RESISTING QUALITIES

BOSTWICK METAL LATH

HAS BEEN USED IN A GREAT MANY

SCHOOLHOUSES

HOSPITALS

OFFICE BUILDINGS

AND STRUCTURES OF ALL DESCRIPTIONS

Address "Truss-Loop" Department

THE BOSTWICK STEEL LATH CO.

NILES, OHIO

The Manifold Uses of Hy-Rib

ROOFS Lay the Hy-Rib Sheets over the supports, pour on the concrete and plaster the under surface. No centering or falsework is necessary. Use Hy-Rib on either flat or sloping roofs. Build permanent and fireproof roofs with Hy-Rib. Discard leaky, short lived corrugated iron.

Hy-Rib Partition Wall or Siding

SIDINGS AND WALLS Set the Hy-Rib Sheets in place; apply the cement plaster, and the wall is complete—no studs are necessary. Use Hy-Rib in place of corrugated iron and wood sheathing for Factories, Foundries, Car Barns, etc. Also for stucco work and residences.

FLOORS A self centering reinforcement for concrete floor slabs; no falsework necessary. For arched floors our shops provide Hy-Rib bent to exact curve—doing away with the expensive field bending and centering.

PARTITIONS The most economical construction for solid plastered partitions. Merely set up the Hy-Rib Sheets—apply the plaster—the partition is complete. Does away with the expense of wiring lath to studs, and makes a stronger wall.

CEILINGS The best reinforcement for ceilings—does away entirely with the small channels and T's ordinarily necessary. Saves the expensive field labor of wiring lath to channels.

FURRING No furring strips or studs of any kind are necessary where Hy-Rib is used. The air space between the ribs stops the conduction of heat, cold and moisture.

Hy-Rib Roof for American Car & Foundry Co. Berwick, Pa.

Free Hy-Rib Catalog (48 pages of useful building information).

Other **Kahn System** Products: **Kahn Trussed Bars; Rib Metal; Column Hooping; Cup Bars; Rib-Lath; Rib-Steel** and **Trus-Con Chemical Products.**

"Kahn System Standards" (third edition), the best handbook on Reinforced Concrete Design, FREE if request is made to us on your business letterhead.

Write us about the work you are interested in and we will mail free catalogs and suggestions that will be valuable to you.

Trussed Concrete Steel Company

Offices in principal cities

617 Trussed Concrete Bldg., Detroit, Mich.

KAHN SYSTEM

Triangular Mesh Concrete Reinforcement

Made by

American Steel & Wire Co.

CHICAGO, NEW YORK, DENVER, SAN FRANCISCO.

Export Representatives: United States Steel Products Exports Co., New York.

automo
suggests tha
ere small stones occ
e way has been where there
a cluster of finer particles."

Fire-Resisting Residences.

At the present time the problem of building is a very grave one after one gets outside the suitable range of ordinary steel construction such as is employed in large city buildings. For all small structures there has been until recently the same old choice that has been available for 5,000 years: wood, brick and stone, alone or in suitable combination. The more slightly civilized people have generally used wood as nearest to the hand and easiest to work, and those of larger experience and powers have gone on to brick and stone. Here in America our civilization is still too crude and the country is too new to have gotten fairly beyond the timber stage. We are not so many generations yet past the log cabin, in spite of the fact that our material progress has taken on the outward form of orderliness and even complexity. This, however, seems really to be only skin deep when one judges it not as a Chauvinist, but as a man of affairs. It is not a civilization of great stability and depth that looks coolly at the casualty list of nearly a hundred thousand killed and wounded annually on the railroads and contemptuously figures the probable cost of safety appliances per victim. The same superficial quality still appears in our building. It would be hard to imagine a country better capable in skill and resources of fine permanent architecture, and it would be quite impossible to find one in which fine permanent architecture has been until quite recently a smaller proportion of the whole.

As a nation we build for to-morrow or next week and lay bets at rather small odds with the insurance companies that our structures will burn before they rot or tumble down. A large proportion of the buildings erected in some parts of this country are apparently of the flimsiest timber construction compatible with their holding together until they are sold, and in consequence the losses annually by fire rise to an amount that is simply appalling. Insurance with all its benefit to the individual in case of disaster cannot make up to the community as a whole the losses thus incurred. Somehow, in the long run, the losses

—Extract from Editorial in Engineering Record, Oct. 31, 1908.

One of the most celebrated architects in the country is now building for himself a residence of

Terra Cotta Hollow Tile

in accordance with the methods advocated in this book.

These methods have solved the problems of

Economical Fireproof Houses

and they are meeting with the endorsement of the country's greatest architects.

If you have not a copy of our book—ask for one.

National Fire Proofing Company

Manufacturers of

Terra Cotta Hollow Tile

Contractors for Construction of Fireproof Buildings

The largest company in the world devoted exclusively to the business of fireproof construction. Capital Twelve and one-half Million Dollars.

Pittsburgh, Fulton Building
Philadelphia, Land Title Bldg.
Washington, D. C., Colorado Building
Boston, Old South Building
St. Louis, Bank of Commerce Bldg.
Minneapolis, Minn., Lumber Ex.
San Francisco, Monadnock Bldg.
Chicago, Commercial National Bank Building
New York, Flatiron Building
Cincinnati, Union Trust Bldg.
Cleveland, Cuyahoga Building
Canton, O., City National Bank Building

Twenty-six factories throughout the United States.

Hot Galvanized Slotted Steel Studding

Slotted Steel Studding may be obtained *hot galvanized.*

Our hot galvanizing more than meets the rigid government tests for galvanizing.

The zinc will not scale under any bending of the stud or other mechanical injury. Neither dampness, lime nor patent plasters will injure this *real galvanizing.*

Parker Steel Corner Bead outlines a perfect corner that will last as long as the rest of the building—saving many times its cost to the owner through permanence of wall and decorations.

Architects who want facts and actual construction figures on the lightest, cheapest, most soundproof, stiffest and narrowest fireproof partition, are invited to write us.

Sharon Steel Hoop Company
Commercial National Bank Bldg., Chicago

NEW YORK REPRESENTATIVES
FULLER BROS. & CO.
139 Greenwich Street, New York City

SILVER LAKE A

Our name is stamped on every foot

We guarantee

SILVER LAKE SASH CORD

because we know that it is made by skilled labor, on the best braiding machines and from the best stock obtainable.

Specify SILVER LAKE A

COMPLETE ELECTRIC LIGHT PLANTS

RICHARDSON ENGINEERING CO.
HARTFORD CONN.

LUFKIN MEASURING TAPES and RULES

Are Indispensable for Accurate Work

For Sale Everywhere. Send for Catalog No. 20.

The LUFKIN Rule Co. Saginaw, Mich., U. S. A. New York, London, Eng. Windsor, Can.

Porcelain Enamel Paint Reg. U. S. Pat. Off.

Bessemer Rustproof Paint Reg. U. S. Pat. Off.

Galvanized Iron Primer

Waterproof Flat Unicoat Reg. U. S. Pat. Off.

For details see Sweet's RINALD BROS. 1142-1146 N. Hancock St., Philadelphia, Pa.

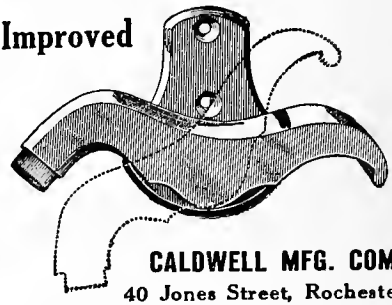
The Zimmerman Patent Iron Base and Ventilator

allows water to run off the porch floor without wetting the bottom of column, thus preventing rot. Write for circular "X."

Syracuse Corner Block Factory, Syracuse, N.Y.

Empire Door Holder

Improved



50 per cent. greater pressure on the floor than any other. Easy to apply. Easy to operate.

CALDWELL MFG. COMPANY
40 Jones Street, Rochester, N. Y.

DRAUGHTSMEN

The Vermont Marble Company, Proctor, Vermont, employ a large corps of draughtsmen and have positions open from time to time. Men with experience in marble and stone construction are preferred. There are also openings for men of general architectural training who would care to take up this line of work.

We are Importers and General Agents for the FAMOUS

"KOH-I-NOOR"

and other Pencils manufactured in Austria by

Messrs. L. & C. Hardtmuth

EUGENE DIETZGEN CO.

214-220 East Twenty-third Street, - New York

Manufacturers of Surveying and Mathematical Instruments and Drawing Material.

Branches—Chicago, San Francisco, New Orleans, Toronto

WE DO PLANTING FOR ARCHITECTS

We shall be pleased to mail our illustrated General Catalog No. 85 to Architects having Landscape work. Submit to us your list of requirements for special quotations. Visit our Nurseries.

BOBBINK & ATKINS

Nurserymen, Florists and Planters

RUTHERFORD, N. J.

YOUR CATALOG PRINTED and delivered to every practicing Architect in the country for less than you can pay postage. Investigate this method.

SWEET'S
11 EAST 24th ST. NEW YORK.

SAMSON SPOT CORD can be distinguished by our Trade-Mark, the Colored Spot. It has been proved by long experience to be the most economical device for hanging windows. See page 579 of SWEET'S INDEX.

SAMSON CORDAGE WORKS, - BOSTON, MASS.

Also Gorton Side Feed Boilers

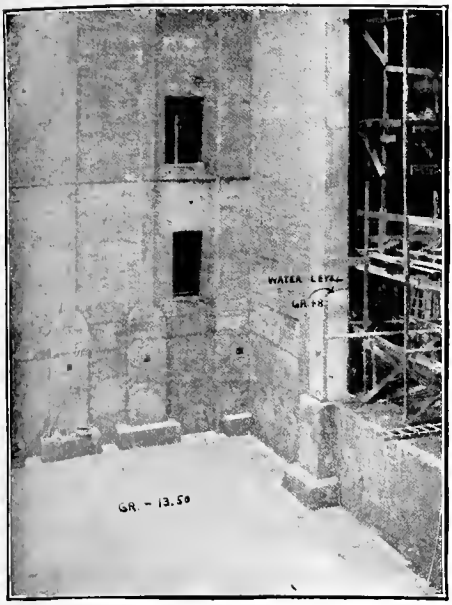
IT SAVES COAL

The Gorton Quick Opening Radiator Valve

With the Gorton Valve it is easier to turn off the radiator than to open a window. One-third of a turn of the lever handle and you have closed the valve. By closing the valve instead of opening the window you stop the unnecessary waste of heat and reduce the coal bill.

Just what you want—send for prices

GORTON & LIDGERWOOD CO., 96 Liberty Street, NEW YORK



GRAND OPERA HOUSE BOSTON, MASS.
Wheelwright & Haven, Archts.

OUR ILLUSTRATED CATALOG SENT FREE UPON REQUEST

NOW BEING WATERPROOFED WITH
HYDROLITHIC CEMENT

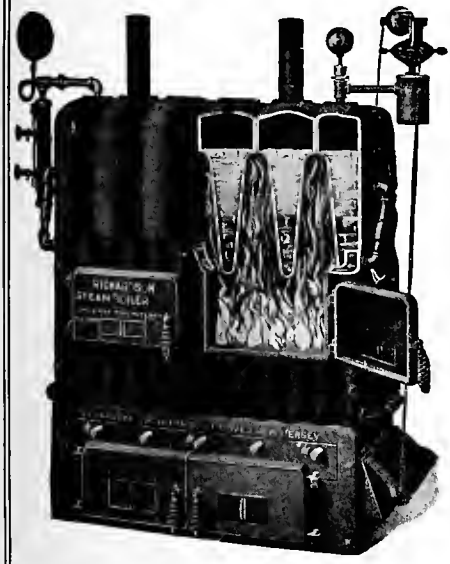
BY

THE WATERPROOFING CO.

BOSTON NEW YORK PITTSBURG
147 East 35th Street

In this building a constant pressure due to a head of 21.5 feet of water is successfully resisted by our method of placing an inside waterproof coating of Hydrolithic cement.

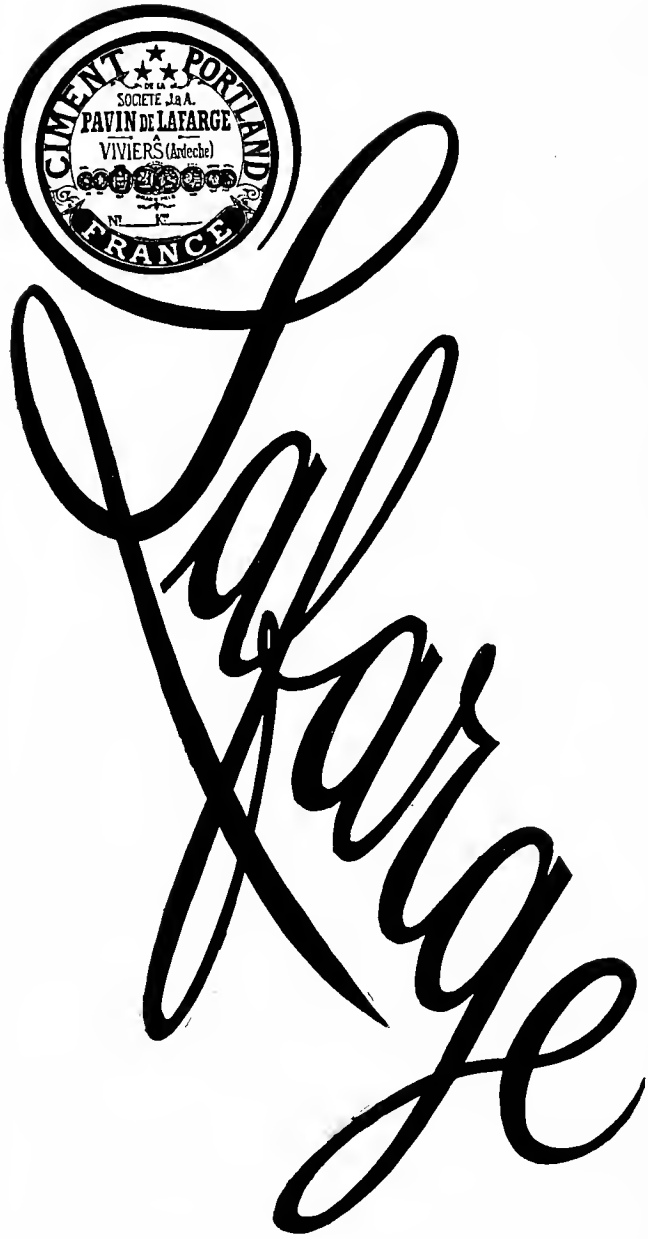
ACCESSIBLE POSITIVE
PERMANENT



"PERFECT" WARM AIR FURNACE. "PERFECT" COOKING RANGES. RICHARDSON STEAM AND WATER BOILERS. THOUSANDS IN USE. PLEASE EVERYBODY.

SEND FOR CATALOGUE

RICHARDSON & BOYNTON
Chicago **234 Water Street, New York** Boston



Will not Stain
Limestone
Granite or
Marble
The Best Cement
for Artificial
Stone Making
and Exterior
Stucco
Construction

Also
EXTRA
WHITE
LAFARGE
for use with
Light Brick, Terra Cotta
White Granite or
Marble

NON-STAINING CEMENT CO.

156 FIFTH AVENUE, NEW YORK

SOLE AGENTS FOR THE UNITED STATES AND CANADA

ROOFING QUALITY

Atlas Roofing Co.'s Plan a Relief to Architects and Owners. A Good Building Soon Becomes Worthless Without a Good Roof

Money cannot be better invested than by judiciously placing it in ROOFING QUALITY.

No part of the art and science of building is more diversified and complicated than the roofing, and no part requires closer attention or greater skill.

OUR PLAN

We have made a close study of roofing (metal, tile and slate) and of sheet metal work of all kinds. Knowing from practical experience the value of good work, we make it a strict rule to furnish the best quality of work and nothing else.

Relief for Architects, Contractors and Owners

This plan means that those who favor us with their contracts need not bother with the practical details, for our specially trained experts will give the work better attention than could be given by any person who has not had the good fortune to be favored with exceptionally fine opportunities to acquire a *thorough, practical knowledge* of the business.

REFERENCES

Of the buildings shown in this issue we have been intrusted with contracts for works in our line on the following:

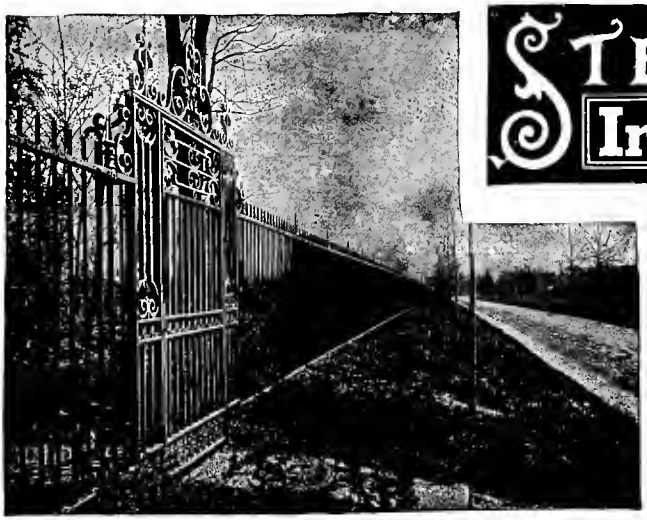
Rockefeller Hall, Cornell University
Goldwin Smith Hall, Cornell University
Dairy Building, Cornell University, slate roofing
Mr. John M. Carrere's residence, "Red Oaks"
Daniel Guggenheim, copper gutters and leaders
Blair residence, Oyster Bay, L. I., mottled slate roof
Ely School, Greenwich, Conn.
E. H. Harriman Gate Lodge and Station

We handle work on contracts of any size anywhere outside of New York City.

May we handle some of your roofing and sheet metal work?

Atlas Roofing Co., L. D. Phone No. 901 **Newburgh, N.Y.**

17



STEWART Iron Fence

LOOKS THE BEST
LASTS THE LONGEST
COSTS THE LEAST

Write for Catalogue

The Stewart Iron Works Co.
1727 Covington Street
Cincinnati, Ohio, U.S.A.
"The World's Greatest Iron Fence Works"

PONCE DE LEON HOTEL
ST. AUGUSTINE, FLORIDA

Protected from Lightning by the N. WALLACE System of Solid Copper Lightning Conductors.

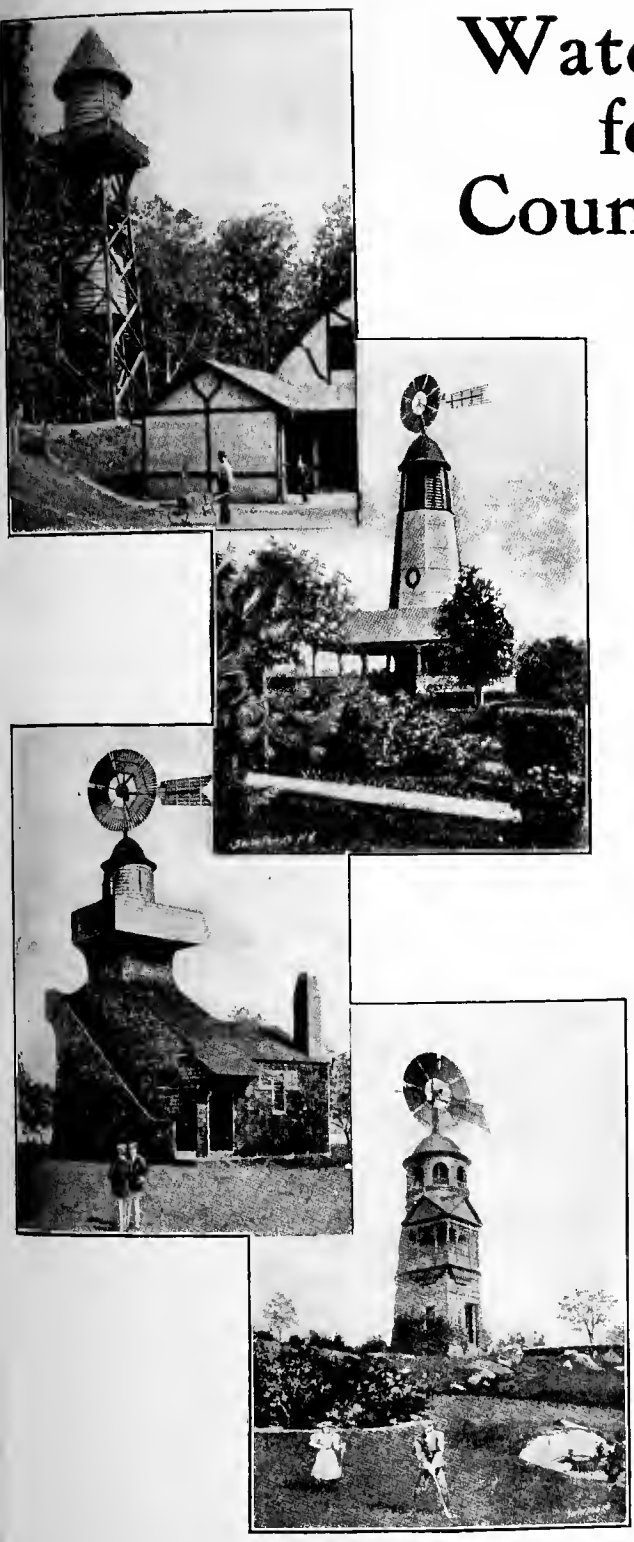
N. WALLACE, Farmington, Connecticut

Dodge Reports follow, step by step from the architect's office to the finished building, all building operations throughout the United States. By these reports you learn not merely what goods are needed, but also the moment when they are needed. The F. W. DODGE COMPANY, 11 East 24th St., N. Y., also Boston, Philadelphia, Pittsburg and Chicago.

SOMETHING NEW
TABLOID CIRCULARS

as they are to be published in the Record and Guide, will provide an economical method of promoting sales. *Send for sample sheets.*

THE RECORD & GUIDE CO., 11 East 24th Street, N. Y.
841 Monadnock Bldg., Chicago.



Water Supply for Fine Country Places

WHAT can be more picturesque than a well designed windmill amid the proper surroundings? This oldest and most economical power plant for pumping water lends itself to the beauty of the landscape as nothing else does, adding a charm to an estate not to be secured in any other way.

We make windmill and tank outfits of **quality,** our work today giving satisfaction on thousands of America's finest estates.

Let us send you our book, and let us further give you the benefit of a long experience in solving any problem you may have involving water supply.

A. J. Corcoran Inc.

NEW YORK OFFICE
11 John Street

FACTORY: Jersey City, N. J.

REINFORCED CONCRETE

FOR

HOUSES

Reinforced Concrete Residence of Wm. C. De Lanoy, Esq., at Short Hills, N. J.
John A. Gurd, Architect

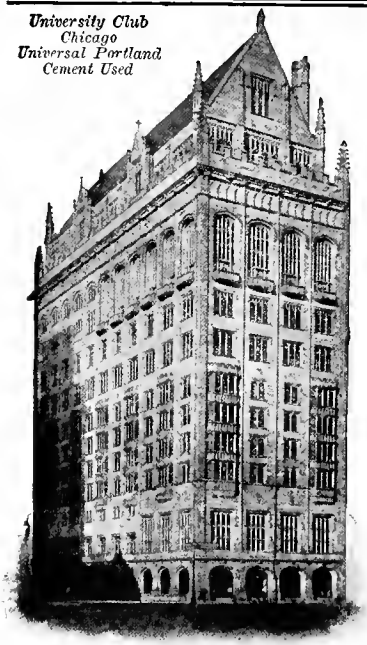
We have for years specialized in the finest residence work in Reinforced Concrete, and have obtained for the architect the exact effects required by his designs in structure, detail, texture and color. Our completed works are our testimonials, showing the fine results obtainable by experience in combination with technical knowledge. FULL INFORMATION ***on request.***

BENJAMIN A. HOWES

Engineer and Contractor

15 WEST 38th STREET **NEW YORK**

University Club
Chicago
Universal Portland
Cement Used



UNIVERSAL PORTLAND CEMENT COMPANY
UNIVERSAL
PORTLAND CEMENT
CHICAGO-PITTSBURG

Six million barrels of Universal Portland Cement are used annually by discriminating architects, engineers and contractors, in all classes of plain and reinforced concrete construction.

UNIVERSAL
PORTLAND CEMENT CO.

CHICAGO — PITTSBURG

The Success of CONCRETE CONSTRUCTION

in housebuilding depends upon the quality of cement used.

Whether you wish a solid concrete house, or one built of concrete blocks and covered over with stucco, or an all stucco house, or a plastered, half-timbered effect, the essential fact remains the same—that the cement used to make the concrete must be the best you can get.

ATLAS PORTLAND CEMENT

combines all the qualities needed to produce a successful building material.

Any kind of Portland Cement will not give the best results. It must be Atlas, because Atlas stands for quality. It is the name of the one brand that is always pure and uniform, that is made in only one quality and that the best—the same for everybody. The United States Government bought 4,500,000 barrels of Atlas Portland Cement for the Panama Canal.

"CONCRETE HOUSES AND COTTAGES," Vol. I. Large Houses; Vol. II. Small Houses. Price $1.00 per volume.

"CONCRETE COUNTRY RESIDENCES" (out of print). Price $2.00.

"CONCRETE COTTAGES" (sent free).

"CONCRETE CONSTRUCTION ABOUT THE HOME AND ON THE FARM" (sent free)

REINFORCED CONCRETE IN FACTORY CONSTRUCTION" (delivery charges 10c.).

"CONCRETE IN RAILROAD CONSTRUCTION." Price $1.00.

"CONCRETE IN HIGHWAY CONSTRUCTION." Price $1.00.

"CONCRETE GARAGES" (sent free).

If your dealer cannot supply you with Atlas, write to

THE ATLAS PORTLAND CEMENT CO., DEPT. A 30 BROAD ST., NEW YORK

Largest Output of any Cement Company in the World—Over 50,000 Barrels per Day

THE ATLAS PORTLAND CEMENT CO. PORTLAND ATLAS CEMENT 30 BROAD ST. NEW YORK

NONE JUST AS GOOD

GENUINE ROSENDALE CEMENT, as now manufactured, shows a marked improvement over that formerly sold.

The Finest Ground Cement Produced is Manufactured by

Consolidated Rosendale Cement Company

50 Church Street, New York

SPECIFY

EDISON PORTLAND CEMENT

85% THRU 200 98% THRU 100

UNIFORMLY 10% FINEST GROUND CEMENT MANUFACTURED

SALES OFFICES

New York, St. James Building
Philadelphia, Arcade Building
Pittsburg, Machesoey Building
Boston, Post Office Square Building
Newark, Union Building
Savaonah, National Bank Building

"LEHIGH" PORTLAND CEMENT

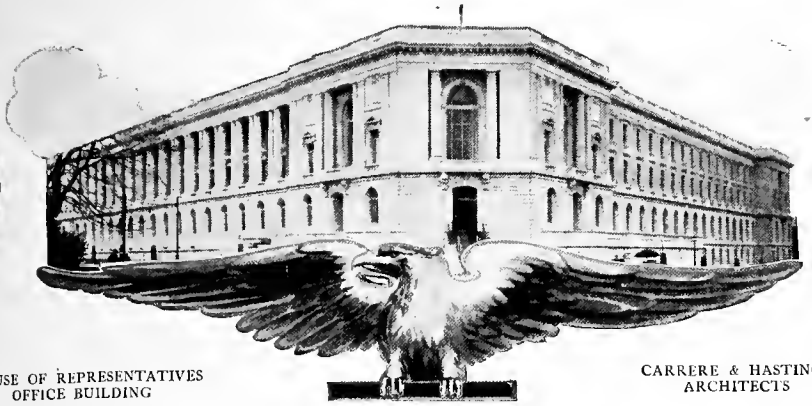
Is the Best for High Class Engineering Work

MANUFACTURED BY

Lehigh Portland Cement Company

WESTERN OFFICE:
725 Rockefeller Bldg., Cleveland, Ohio

ALLENTOWN, PENNA.



HOUSE OF REPRESENTATIVES
OFFICE BUILDING

CARRERE & HASTINGS
ARCHITECTS

At the Nation's Capital

was used *exclusively* in the construction of the *office buildings* of the *United States Senate* and the *House of Representatives*—two of the most notable endorsements ever given any *Portland Cement.*

Used for every purpose in the world of building and construction. Our booklet on Concrete—FREE—will open your eyes to its possibilities. The advice of our Expert Consulting Engineer is at your service—Gratis.

Address Dept. 24

Dragon
PORTLAND CEMENT
CONCRETE

IN USE TWENTY-ONE YEARS
DRAGON PORTLAND CEMENT
LAWRENCE PORTLAND CEMENT COMPANY

Ernest R. Ackerman, Pres't
The Lawrence Cement Co.
NEW YORK

Lawrence Portland Cement Co.
PHILADELPHIA

Medusa Waterproof Compound

Makes Concrete Watertight

(Patented April 23, 1907.)

Soulard Public Bath House, St. Louis, Mo.

WHITE PORTLAND CEMENT
SANDUSKY PORTLAND CEMENT CO.
SANDUSKY OHIO.
STAINLESS.

Medusa products signify quality

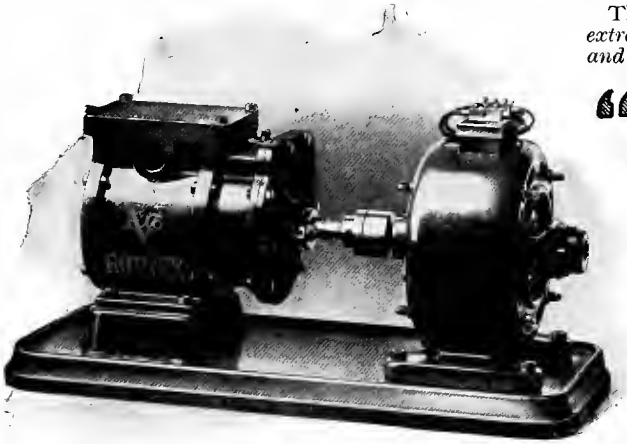
Pool, floors, steps and walls surfaced with Medusa Pure White Stainless Portland Cement, containing Medusa Waterproof Compound.

SANDUSKY PORTLAND CEMENT CO.

SANDUSKY, OHIO, U. S. A.

Annual Output Medusa Portland Cement, 1,500,000 barrels.

The Vacuum Cleaning System That Actually Eliminates Dirt



The system that not only *insures the absolute extraction* of dirt and dust, but insures its *sanitary and economical* removal after it is extracted.

"ROTREX"

The vacuum producing machine of the **ROTREX SYSTEM** develops such powerful suction as to *absolutely* draw out with searching thoroughness all dust and dirt, however deep seated it may be. For the **ROTREX** *displaces a larger volume of air* for a given horse power than any other machine on the market.

Unlike any other Vacuum Cleaning System, the **ROTREX SYSTEM** of Vacuum Cleaning *automatically conveys the dust and dirt direct to the sewer* without any handling on the part of the attendant operating the machine. In other words, the dust and dirt, after being removed by suction, do not again become *exposed to the atmosphere either inside or outside the building.*

Consider These Points of Superiority

1. No sliding blades in pumps.
2. No rubbing parts.
3. Eighty per cent. efficiency.
4. Less wearing parts.
5. Discharges the dirt direct to the sewer.
6. No separating tanks.
7. Requires less floor space.
8. No unsanitary emptying of tanks.

WRITE FOR FURTHER PARTICULARS

Vacuum Engineering Co., 114-118 Liberty Street, New York City

BRANCH OFFICES IN ALL PRINCIPAL CITIES

Electric Weld PRODUCTS

ARE FULLY GUARANTEED

Send for Catalogue illustrating and describing the "ELECTRIC WELD" Combination Boiler and Gas Water Heater

John Wood Manufacturing Co.
Conshohocken, Pa.

San Francisco and Oakland, Cal.

There are exactly-right

KOH-I-NOOR Pencils

for every architect

The World's Standard of Pencil Quality.

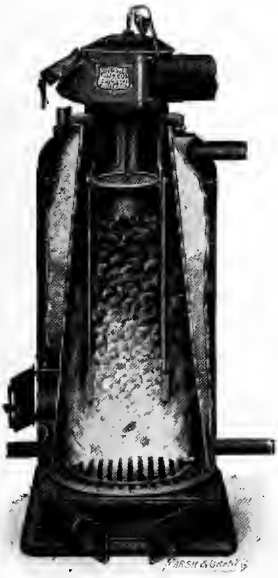
17 different degrees of Hardness and Softness, 6B to 9H, and 2 Copying degrees.

Each degree, and each pencil in each degree, is always the same.

10c. each, $1 a doz. Pa less and you get less.

At all "Koh-i-noor Quality Stationers.

L. & C. Hardtmuth Estab. 1790 New York



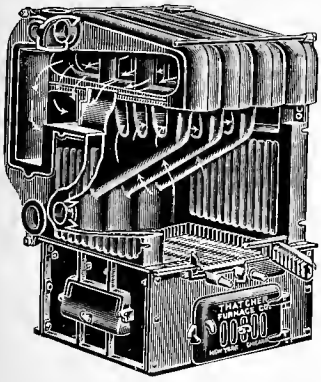
Tough Flange Steel *vs.* Brittle Cast Iron

WILKS WATER HEATERS are built just as power boilers, and are made of the same material.
The wonder is that any ARCHITECT should specify a cast iron water heater which he knows will some day crack (from any of a dozen good reasons).

There is a WILKS for every use for which a water heater may be used. See Sweet's Index, page 805, for sizes and capacities. Circulars and full information upon request.

S. WILKS MFG. COMPANY

3535 Shields Avenue, CHICAGO, ILL.



Made in 72 sizes to suit the Cottage or Mansion

THATCHER

"PROGRESS" BOILER

Unique in construction, we claim it to be the most effective and economical Steam or Hot Water Heater ever made.

Investigate

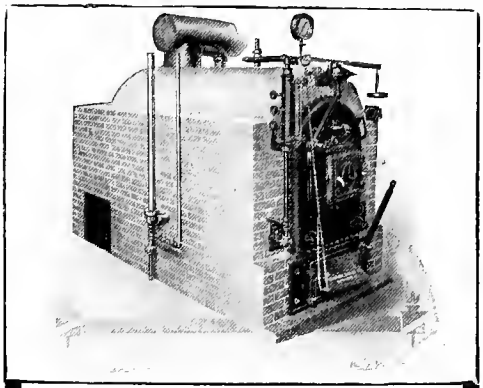
THATCHER FURNACE COMPANY
Established 1850
110-116 Beekman Street, New York **154 Lake Street, Chicago**

Ranges? Yes! Thatcher Quality

BOSTON COPPER RANGE BOILERS
are the BEST made and are all GUARANTEED

We make four grades, to meet every demand of QUALITY and PRICE. We make Pressure Boilers to stand any required pressure up to four hundred pounds.
Designed in every detail to give long and reliable service. Embodying only highest grade materials and skilled workmanship in their construction. Special sizes to order.

DAHLQUIST MANUFACTURING COMPANY
Largest Manufacturers of Copper Boilers in New England
40 WEST THIRD STREET **SOUTH BOSTON, MASS.**



The Design and Construction of

KEWANEE Firebox BOILERS

Brands them as being the best heating boilers made for all installations from 500 sq. ft. to 12,500 sq. ft. of radiation.

Those who know about these things can see at a glance that KEWANEE boilers must be quick and economical heaters. It is the particular design that makes them so.

The construction of them makes them most durable and safe. One of the features in construction is the base ring and door ring. They are made of semi-steel, not cast iron. They are tough and will not crack.

KEWANEE boilers will last for years. Nothing about them to give out. They cost less than other boilers, figuring according to our ratings, and above all, they will positively do what they are rated to do, and do it all the time.

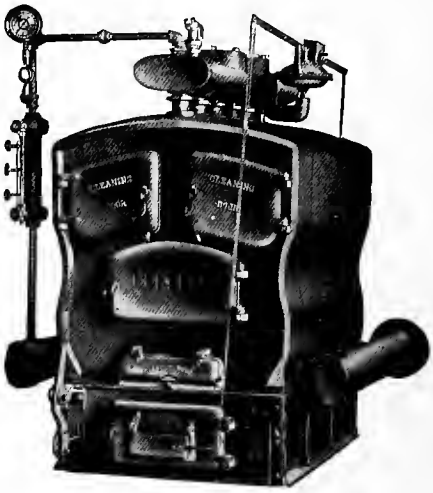
Send for brand new No. 54 firebox catalogue.

KEWANEE BOILER COMPANY
KEWANEE, ILLINOIS

The Attention of the Architects is called to the new

"AMERICAN" BOILER

For Steam and Hot Water



Showing No. S 326 American

This is a new boiler now ready for shipment.

Our Blue Book illustrates and describes this new boiler, shows interior construction. gives measurements, capacities and list prices.

Ask for American Blue Book.

PIERCE, BUTLER & PIERCE MFG. CO.

SYRACUSE, N. Y.

New York City: Cor. 4th Ave. & 22d St.
Boston: 61 High St.
Philadelphia: 936 Arch St.

Your Advertisements in the Big National Magazines

Those page advertisements of the "RICHMOND" line which you see in all the big magazines are *your* advertisements, as much as ours.

The whole $100,000.00 expenditure is for the purpose of increasing *your* profit as well as ours, and it will do it.

These convincing advertisements are bringing us prospective buyers of heating systems—already *half sold.* Shall we turn them over to you?

"RICHMOND"

Boilers — Enameled Ware — Radiators

The success of the "RICHMOND" line has been built up by utilizing inventive ingenuity. It represents the climax of all that is new and good—beside many exclusive points which are to be found nowhere else but in the "RICHMOND" line.

Now with widespread advertising, it will be doubly easy to sell.

We are doing our part—will you do yours?

For descriptions and prices on "RICHMOND" Boilers and Radiators, address

Cameron Schroth Cameron Co.

Western Distributors "RICHMOND" Boilers and Radiators

189 Michigan Street, Chicago, Illinois

THE McCRUM-HOWELL CO.

Eastern Distributors "RICHMOND" Boilers and Radiators

Park Ave. and 41st Street, New York City

"RICHMOND" Baths—Lavatories—Sinks are unsurpassed

For description and prices on Enameled Ware, address

THE McCRUM-HOWELL CO.

Two factories at Uniontown, Pa.
One at Norwich, Conn.

Park Avenue and 41st Street, New York

Saves Any Architect $65.00

SPECIAL LIMITED OFFER TO ARCHITECTURAL RECORD READERS OF 100 LATEST

Model 8 American Typewriters

This special offer gives you a high-grade Typewriter at $35, the lowest price at which a standard machine has ever been sold, and on easy terms. The American will do the work of the $100 machines at high speed, and is covered with the same guarantee. It is their equal because it has every essential feature; 1200 cumbersome, troublesome and easily broken parts of other machines have been eliminated. Its simplicity of construction, the absence of the thousand and one little levers, bars, screws and springs which make the cost of $100 machines accounts for this unequaled offer. The absence of all these complicated parts makes the American tip the scales at 12 pounds. It's the only high grade machine that is really portable. The fundamental point of American superiority is the single type-bar-one piece of steel-non-bendable and unbreakable by any stroke that can be delivered on the key, and this is the cause of its simplicity, durability, efficiency and compactness.

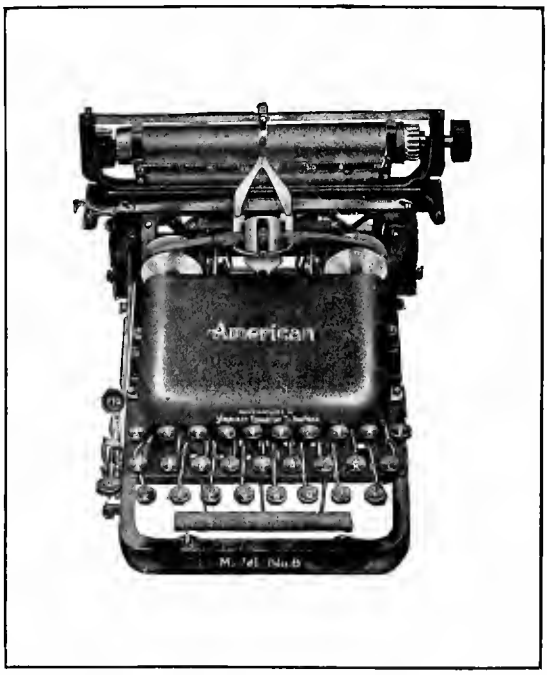
Compare the Essential Features of the $100 Machine and the $50 American as noted below

The $100 Machine

Universal Keyboard
Print from Ribbon
Type Bar Machines
Adaptability for Rapid Work
Various Degrees of Complicated Mechanism
High Quality of Work
Carriage Action on Some, Light; Others Cumbersome
Portability Impossible When Convenience is Considered
Durability Varied
Two-Color Ribbon Shift only on Some
A few have Tabulating Indicator

Price, $100

You have the choice of three styles of type: Large for public speakers, medium for business, elite for personal correspondence.



The $50 American

So Has the American
So Does the American
So Is the American
Speed Unlimited on American
1200 Less Parts on the American
Perfectly Aligned, Clear Cut Impression from American
Extremely Light, Ball-bearing Carriage on American
Fewer Parts, Less Weight
One-piece Bar, Less Complex, Longer Life
Two-Color Ribbon Shift
Tabulating Indicator on Every American

Special Price, $35

Each machine has rubber dust cover, oil, type brush and full directions for using. Handsome enameled metal case $2.50 extra, canvas traveling case $5 extra.

American Typewriter Co., 265 Bway., N.Y.

Please have shipped to me for 5 days' free trial, one latest model American Typewriter offered in Architectural Record, the regular price of which is $50. I authorize you to do this with the understanding that if I am not satisfied—if the machine is not satisfactory to me, I am to notify you within 5 days to that effect, and hold same subject to your order or deliver it to the express agent carefully packed as you may direct, or if I decide to keep it, I am to pay $5 after 5 days and $5 per month until the full special price of $35 is paid, machine to remain your property until paid for.

Name _____

Address _____

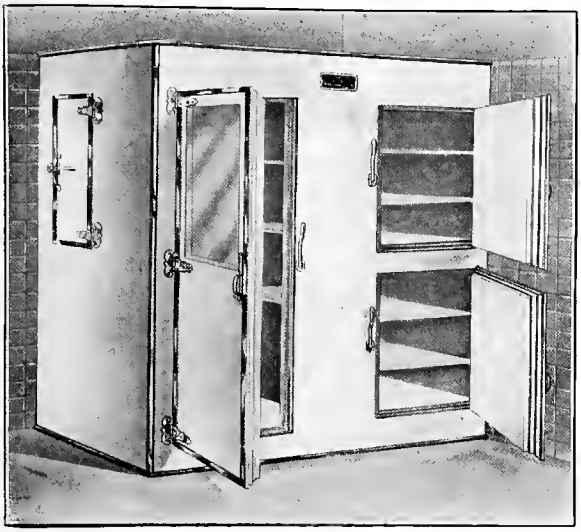
Town _____ State _____

References required.

FIVE DAYS' FREE TRIAL Don't buy the American on our mere say so, fill out the attached coupon, and mail it to us at once. We will ship you an American F.O.B., N. Y. Use it in your office, give it the severest test you can, note its simplicity, the durability assured by the use of only the very finest materials throughout, its efficiency, its compactness, its superior finish and its high speed. If the machine is all we say and you are entirely satisfied, keep it, send us $5 as a first payment, not $35 all in one lump, the balance you can pay at $5 a month for six months. Don't delay, simply fill out and mail the coupon with references. The machine will answer all questions. Specify the style of type you wish and if you wish a hard platen for manifolding. Three good carbon copies guaranteed.

American Typewriter Company, 265 Broadway, N.Y.

Incorporated 1893



One of the eleven large special Refrigerators built for the United States Senate Office Building

Illustrated on pages 99-100

GENUINE PORCELAIN ENAMEL
Inside and Outside

Inside linings applied to lock joint making it practically a one piece lining

Write for illustrated catalogue

WHITE ENAMEL REFRIGERATOR COMPANY

MANUFACTURERS BOHN SYPHON SYSTEM

New York Office and Salesroom, 59 West 42d Street

ST. PAUL, MINN.

Broughton Self Closing Work

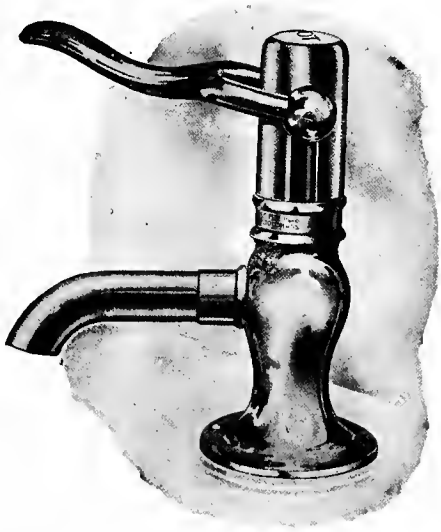
HAS MADE

A Clean Record

THIS line of Self Closing Basin Cocks, Bibbs, etc., has been giving absolute satisfaction in many of the finest structures designed by Messrs. Carrere & Hastings, as well as other prominent architects, and stands alone as the best of its kind on the market.

USED IN

New York Public Library
New York City



E. Stebbins Mfg. Company

BRIGHTWOOD STA. *SOLE MAKERS* *SPRINGFIELD, MASS.*

Jenkins Bros. Valves

have the favor of engineers because they are the easiest to keep tight. Made of new steam metal of best quality. Interchangeable parts. Contain genuine Jenkins Discs—either *Hard*, for steam and hot water use ; or *Soft*, for cold water, air or gas.

May we send you catalog?

JENKINS BROS., New York, Boston, Philadelphia, Chicago

GLAUBER BRASS MFG. CO.

CLEVELAND AND NEW YORK

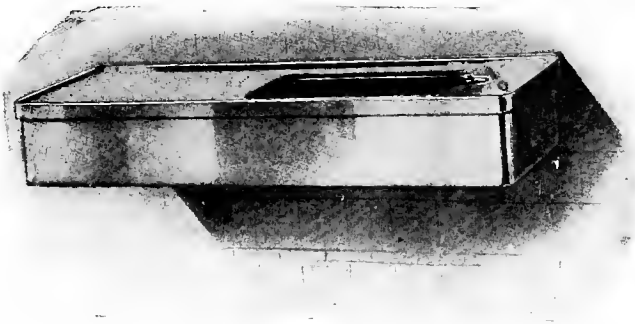
The NATURO Idea

For the first time considers the Water Closet as more than merely a sanitary means for stooling.

The NATURO Slant—seat higher in front than rear—prevents the wetting of the Seat, and at the same time provides the squat posture, now conceded by physicians generally to be a most important factor in the physiological study of the blood supply and its relation to health.

No bathroom is complete without the NATURO and no hospital or institution should be planned without full knowledge of the NATURO idea. Catalog "O" and interesting scientific pamphlet free.

The C. H. Muckenhirn Closet Company - Detroit, Michigan



Pantry Sink and Drainboard, Complete with Apron all Around, Covered with Copper, German Silver, or Nickeline.

Established 1850

JOHN TRAGESER STEAM COPPER WORKS

447 to 457 West 26th St. New York City

DRAINBOARDS & PANTRY SINKS

Covered with German Silver

Dodge Reports follow, step by step from the architect's office to the finished building, all building operations throughout the United States. By these reports you learn not merely what goods are needed, but also the moment when they are needed. The F. W. DODGE COMPANY, 11 East 24th St., N. Y., also Boston, Philadelphia, Pittsburg and Chicago.

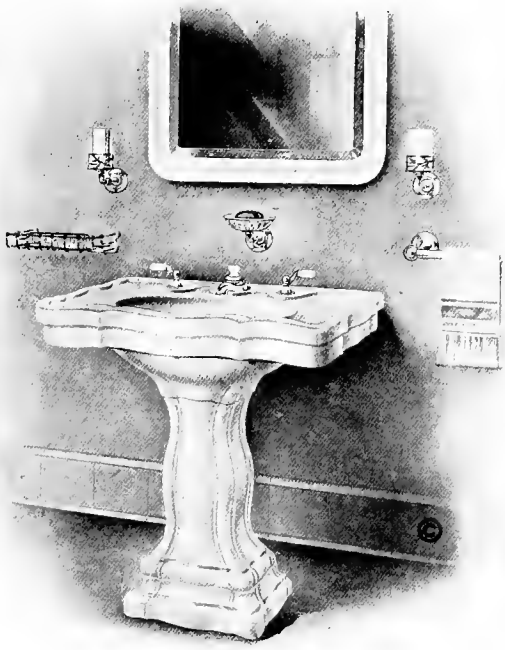
Clow Adamantose Lavatories Epitomize the Potters' Skill

Clow Adamantose Lavatories embody in their material and make all the durable and artistic qualities heretofore obtainable only in two or more varieties.

The successful use of Adamantose Ware in the manufacture of lavatories marks an epoch in the history of sanitation.

We are the sole manufacturers of Adamantose Ware.

The Adamantose Lavatory has the strength of iron, the artistic quality of porcelain, and greater sanitary elements than either porcelain or iron, as it *positively will not craze*, and is absolutely *non-absorbent* and *unstainable—three features not possessed by any other lavatory.*



The "Olympian" Adamantose Lavatory, L-220

Adamantose Ware is absolutely guaranteed. For your protection it bears our name and trademark plainly stamped under the basin

ADAMANTOSE WARE

Beware of infringements.

Our handsome Portfolio L on Clow Adamantose Lavatories is for Architects, Engineers, Plumbers and prospective builders. See that you get a copy by writing for it now. You are also invited to visit our showroom in Chicago, where a complete line of Adamantose Lavatories can be seen, and their merits fully demonstrated.

JAMES B. CLOW & SONS

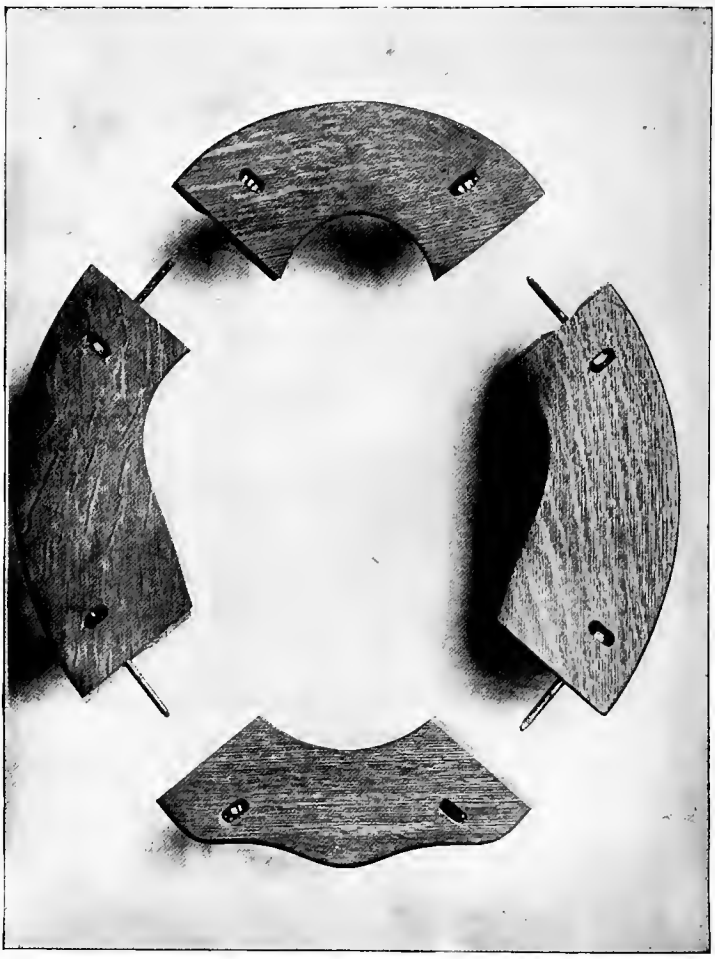
Manufacturers of
Plumbing Goods for nearly half a century

CHICAGO *NEW YORK* *ST. LOUIS* *ATLANTA* *WASHINGTON*
PHILADELPHIA *KANSAS CITY* *MILWAUKEE* *SAN FRANCISCO* *HAVANA*

Actual Experience Shows that there is **no come back** about the justly famous

"Never-Split" Closet Seat

NOTHING can effectually take the place of it in the mind of the Architect who has comprehended the importance to himself and client of specifying exactly that a "Never-Split" Seat of particular design or finish shall be installed with every closet combination.



The Price does not make any difference in any case, being no higher than the better grades of other seats, but it is maintained to all alike, so that there can be no favors shown in competitive bids of plumbers and jobbers. The plumber and jobber will, as a rule, install a "Never-Split" Closet Seat voluntarily when he knows that the owner requires absolutely the best there is on the market as to finish, quality of wood and everlastingness.

"Never-Split" Closet Seats are the highest embodiment—all the style, beauty, sanitary perfection and lasting qualities that can be put into an article of honest manufacture.

Specification data may be obtained from page 8 of our Catalog "C."
Please make requisition by Post Card, or on pages 768-769, "Sweet's."

NEVER-SPLIT SEAT COMPANY

EVANSVILLE, INDIANA

Plate 108 K H
"Ideal" Solid Porcelain "Chatsworth" Lavatory

For many years we have made the most extensive line of

"Ideal" Solid Porcelain Ware

Bathtubs and Lavatories
Kitchen, Pantry and Slop Sinks
and Laundry Tubs

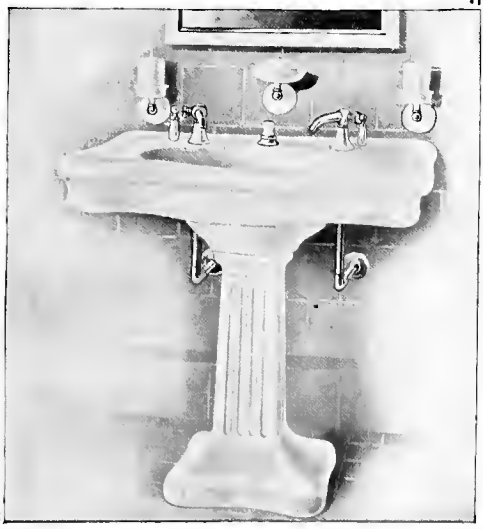
Our wares are in use in the best hotels, apartments, office buildings and homes.

Specify and insist on getting

"T. P. Company" Sanitary Pottery

in your Bathroom, Toilet and Kitchen

Plate 656 K H
"Impervio" Vitreous China "Girard" Lavatory



You will make no mistake in replacing your old washstands with

"Impervio" Vitreous China Lavatories

Our catalogues show the most varied and extensive line of Vitreous China Lavatories. Write for a copy at once.

The Trenton Potteries Company

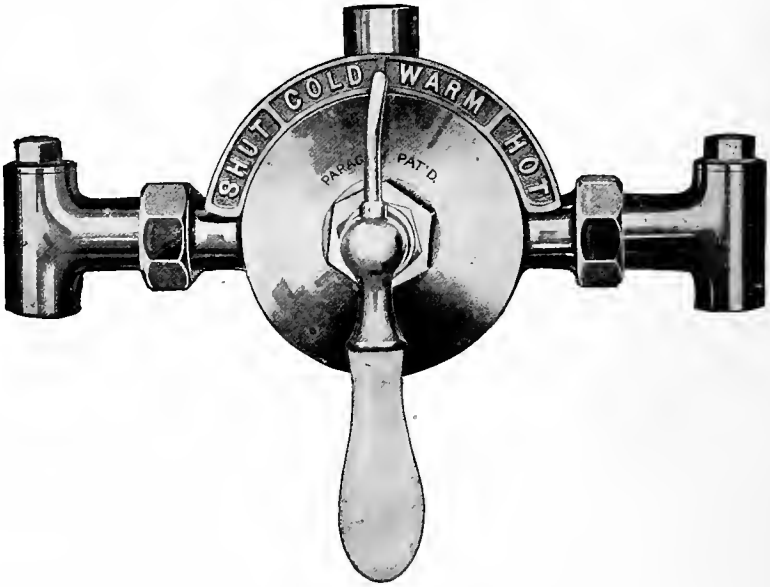
Trenton, New Jersey, U. S. A.

No Bathroom is complete

without the

"Paragon" Anti-Scalding Valve

Used in connection with our Shower Baths



We have designed this valve having the defects of other makes in mind, and have produced a valve that can be depended on at all times and is

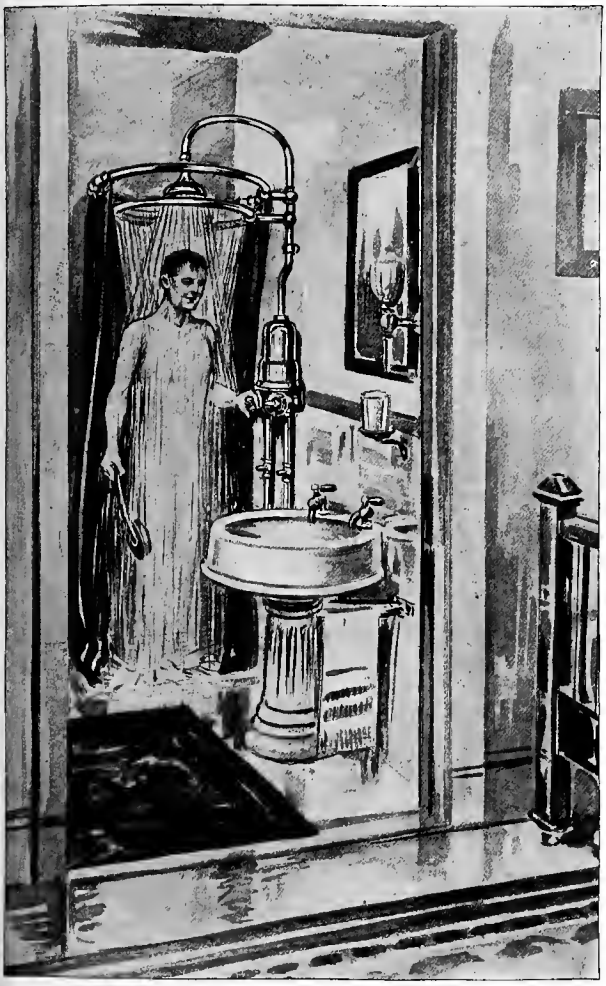
Fully Guaranteed

THE SANITARY CO., Cleveland, Ohio, U.S.A.

Exclusive Makers of "PARAGON QUALITY" Plumbing Goods

One of the Most Celebrated Hotels

in the country has equipped a number of its bath rooms with shower, in place of tub, baths; and the rooms with bath so equipped are in constant demand and guests give them preference over the tub bath rooms. In such equipment the



INGHAM SHOWER MIXER

makes the shower bath the perfection of luxurious bathing. The simple turn of *one* handle gives the bather a shower of water at the temperature desired.

Impossible for the water to be too hot or too cold. Positively eliminates danger of scalding.

Ask for a copy of our book

The Imperial Brass Mfg. Co.

243 So. Jefferson Street

Chicago, Ill.

TEAR THIS OFF, SIGN AND MAIL IT

A.R.1-10

IMPERIAL
BRASS MFG. CO.
243 So. Jefferson St
CHICAGO, ILL.

Send copy of your book

Signed .....

Street No. .....

City .....

"Sweet's" for 1910

is now being distributed

Any architect, general contractor, engineer or other large purchaser of building supplies who has moved during the past year is requested to send his new address to us.
The new "Sweet's" is the best yet.

"Sweet's" for 1911

is now being compiled

If you sell building supplies of any sort and are not now using "Sweet's," you should investigate this economical selling system.
A new feature will be added to the 1911 edition which will interest especially the firms desiring to meet a limited territory.
Write for details and estimate of cost.

"Sweet's"

11 East Twenty-fourth Street, New York

Chicago Philadelphia Pittsburgh Boston

An Architect's Proposition

Plate F-200. (Patented)

The largest and finest kitchen sink ever made in enameled iron ware, and, therefore, "an architect's proposition." Nothing like it made by any other manufacturer. 22x34-inch sink, two 21x22-inch drain boards, 12-inch back and 6-inch apron cast in one piece. 72 inches over all.

ANOTHER ONE

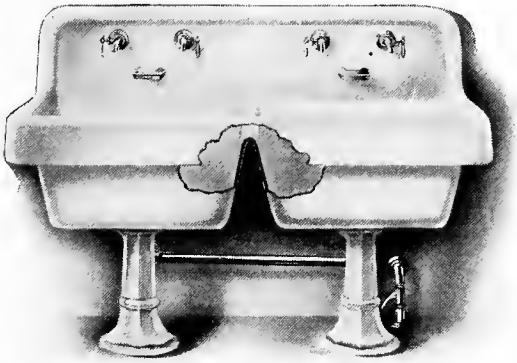


Plate F-301. (Patented)

A sink and laundry tray combination consisting of sink, laundry tray, back and apron cast integral. An entirely new fixture and our own original design. Note the double partition with space between, which prevents damage from expansion and contraction.

If you haven't a copy of catalog "F" ask for it. Shows our complete line of "Southern Beauty" Enameled Ware, including many more new designs.

"Southern Beauty" goods are handled by leading jobbers and plumbers everywhere

The CAHILL IRON WORKS, Chattanooga, Tenn.

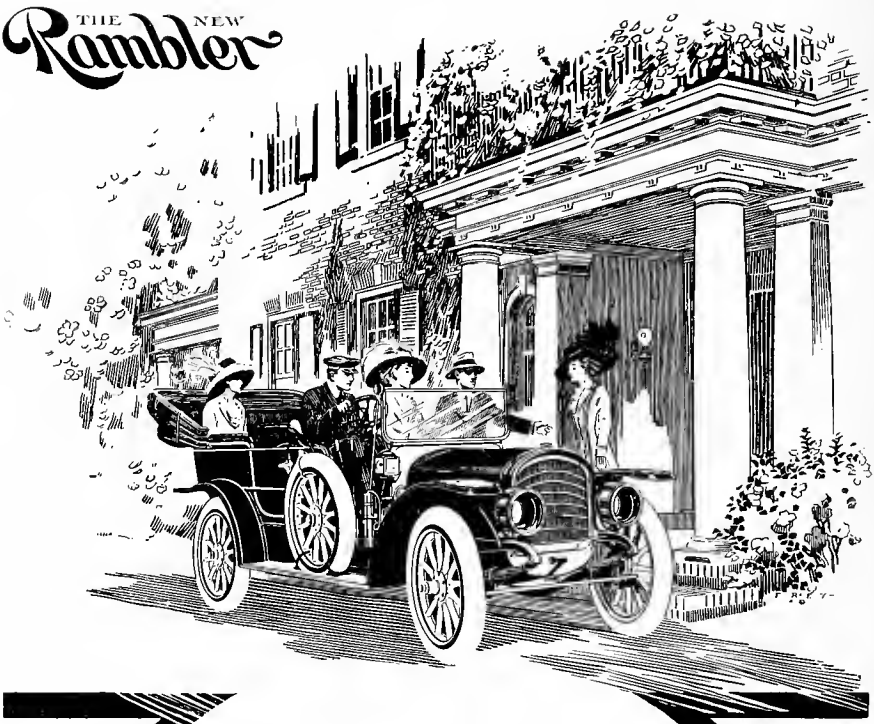
New York Office and Salesrooms: 76 W. 36th St.
Thos. H. Hutchinson, Manager

Portland Office and Warehouse: 650 Sherlock Bldg.
H. A. Heppner & Co., Sales Agents

San Francisco Office: 1749 Sacramento St.
Culin & Stanyan, Sales Agents

Chicago Office: 163 Randolph St.
Harry Verbeek, Sales Agent

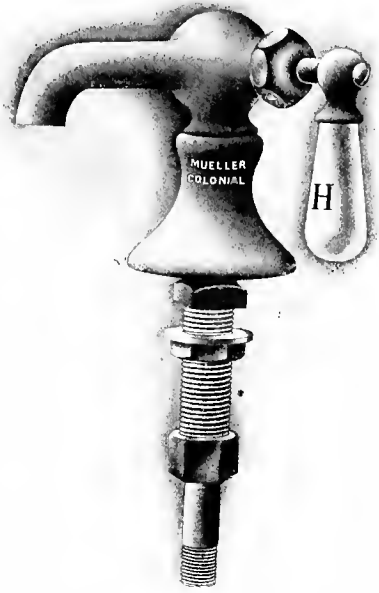
Philadelphia Office: 5604 North Fourth Street; Russell D. Knight, Sales Agent



THE new Rambler is for the particular motorist who admires dignified comfort in every appointment without extravagance in cost. Its distinction as a car of quality is due to the selection, indifferent to cost, of the materials used, and the finished skill applied in the making. Coupled with this is an efficiency assured only by such features as the Offset crank-shaft, Straight-line drive, Spare Wheel, and the new expanding clutch.

Rambler Fifty-five, seven-passenger, 45 h. p., $2500; Fifty-four, five-passenger, 45 h. p., $2250; Fifty-three, 34 h. p., $1800; magnetos included.

Thomas B. Jeffery & Company
Main Office and Factory: Kenosha, Wis.
Branches: Chicago, Milwaukee, Boston, Cleveland and San Francisco



D-1098 1. Patented

Mosquito bar is still on sale, but you wouldn't think of buying it for doors and windows when wire screen is obtainable.

And plumbing goods of the "mosquito bar" kind that have not been improved in fifty years are still on sale, but who would think of buying them when Mueller Colonial Plumbing Brass Goods, that have been improved up-to-the-minute, are offered?

Mueller Colonial Fuller work is massive in design, the absence of ornamentation adding to its richness. The eccentric has an extra wide sweep which pushes the ball far back, allowing the admission of water up to the full delivering capacity. All Mueller Fuller Work has a non-hammering device.

Unconditionally Guaranteed

TRADE MARK
COLONIAL
REGISTERED

H. Mueller Mfg. Co.

Works and General Offices
Decatur, Ill., U. S. A.
West Cerro Gordo Street

Eastern Division
New York, N. Y., U. S. A.
254 Canal St., cor. Lafayette

FIFTY-FIVE YEARS OF QUALITY

1855 WOLFF'S 1910

PLUMBING GOODS

We are in position to furnish every dependable grade of Plumbing-Equipment in all accepted material - for all purposes - and all designed and made in our own factory

L. WOLFF MANUFACTURING CO.

MANUFACTURERS OF

Plumbing Goods Exclusively

The only complete line made by any one firm

SHOWROOMS 91 DEARBORN ST.
GENERAL OFFICES 601 LAKE ST.

DENVER, COLO. CHICAGO TRENTON, N.J.

Luxfer

DOES THE BUILDING NEED DAYLIGHT?

Getting daylight into every part of a building, even into the *darkest* part of the interior or the basement, is a simple matter if the

Luxfer
SYSTEM

is employed. Using real daylight certainly is more satisfactory than paying gas and electric light bills.

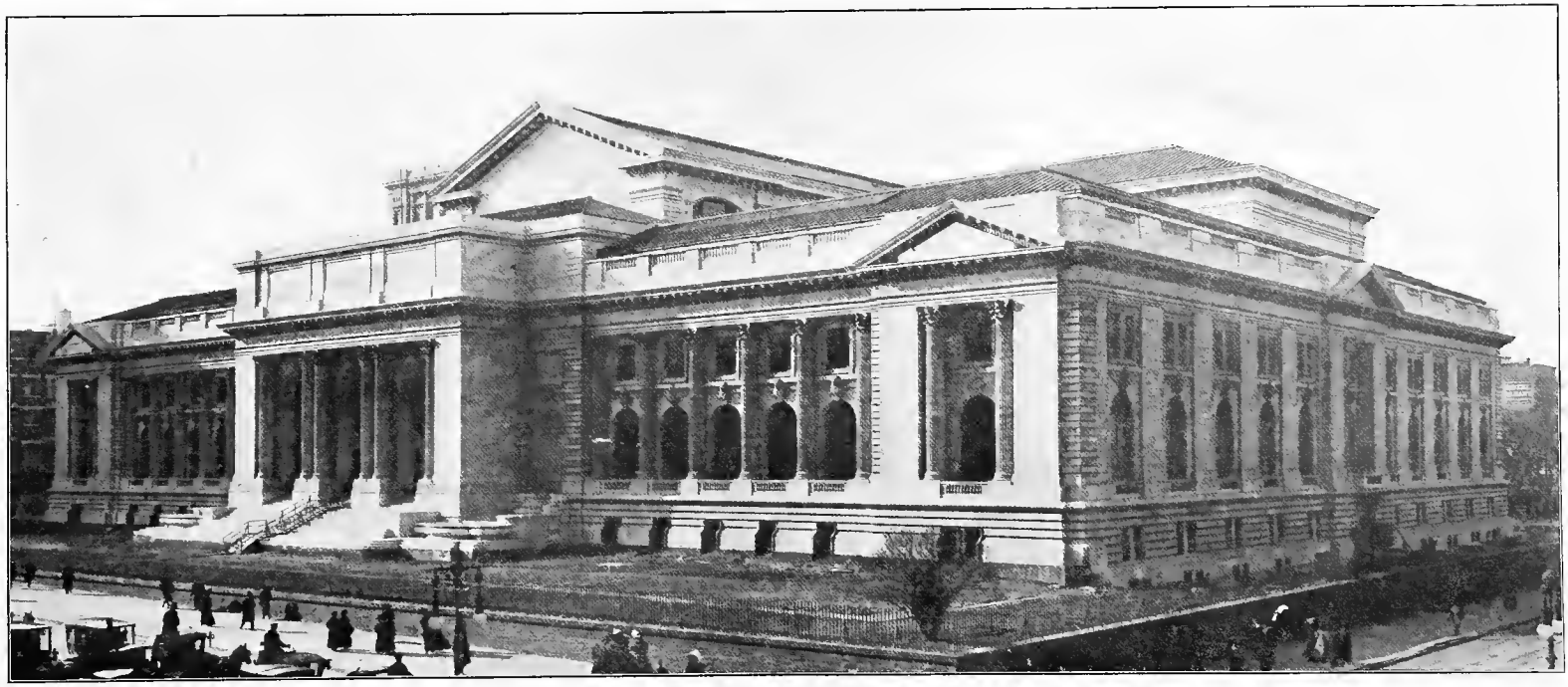
Luxfer

Daylighting pays for itself in a surprisingly short time.

AMERICAN Luxfer Prism COMPANY

CHICAGO, Heyworth Building
BOSTON, 49 Federal Street
BALTIMORE, 25 Old Builders' Exc.
CLEVELAND, 1022 Garfield Building
CINCINNATI, 37 Thoms Bldg.
DULUTH, 106 W. Michigan St.
INDIANAPOLIS, 342 E. Washington St.
KANSAS CITY, 948 N. Y. Life Bldg.
LOS ANGELES, 232 Bradbury Bldg.
MILWAUKEE, 1112 Railway Exc.
NEW YORK, 507 W. Broadway
NEW ORLEANS, 904 Hennen Bldg.
PITTSBURG, 1022 Fulton Bldg.
DALLAS, TEX., Builders' Exch. Bldg.
PHILADELPHIA, 807 Chestnut St.
ROCHESTER, 38 Exchange St.
ST. PAUL, 615 Ryan Building
SAN FRANCISCO, 151 Tehama St.
SEATTLE, 72 Maynard Building

CORK TILING—*The* IDEAL FLOOR



NEW YORK PUBLIC LIBRARY, CARRERE & HASTINGS, ARCHITECTS
Seventy-five rooms in this building are floored with CORK TILING

As usual, the floor problem for this magnificent building was a serious one. A material was required that would be silent, yet durable; warm and comfortable to the feet, yet clean and sanitary; non-inflammable, yet non-slippery; architectural in appearance, yet elastic and unaffected by strains, dampness or heat and cold; but, above all, it must be *architectural and durable;* for this beautiful building is bestowed as a lasting monument to literature and the arts. *Cork Floor Tiling solved the problem.*

For Banking Rooms, Offices, Libraries, Churches, Billiard Rooms, Restaurants, Dining Rooms, Kitchens, Bathrooms

218 La Salle Street
Chicago, Ill.
1933 Market Street

DAVID E. KENNEDY, Inc., 420 Fifth Avenue, New York

164 Federal Street
Boston, Mass.
913 Security Bldg.